

Varieties of Human Species

Human races and polygenism in
Samuel George Morton's *Crania Americana* (1839)

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<p>Tiivistelmä – Referat – Abstract</p> <p>Tämä tutkielma tarkastelee ihmisrotujen muodostamista ja kuvauksia sekä polygenesis-teoriaa Amerikkalaisen Samuel George Mortonin varhaista antropologista tutkimusta edustavassa teoksessa <i>Crania Americana</i> (1839). Tutkielman tarkoitus on nostaa esiin Mortonin rotumäärittysten ja -kuvauksen kulttuurihistoriallista taustaa, joka on aiemmin jäänyt vähälle huomiolle, sillä aiempi tutkimus on keskittynyt Mortonin kallonmittausaineiston analysointiin. Mortonin käsitystä ihmisroduista <i>Crania Americana</i>ssa tarkastellaan kolmesta lähtökohdasta: ihmisrotujen muodostaminen, rotujen kuvaukset ja polygenesis-teoria, joka oli 1800-luvun alussa suosittu teoria, jonka mukaan ihmisrodut oli luotu erikseen eri puolille maailmaa. Kaikki nämä teemat liittyvät läheisesti tieteelliseen rasismiin, joka oli syntynyt kolonialismin ja orjuuden synnyttämästä tarpeesta luoda hierarkkisia eroja ihmisryhmien välille. Tämä kehitys muodostaa laajemman viitekehyksen tutkielmalle.</p> <p>Kutakin tutkielman päälähtökohtaa tarkastellaan erilaisilla metodeilla. Ihmisrotujen muodostamista tarkastellaan temaattisista näkökulmista, kuten rotujen muodostamisen historia, rotuhierarkiat, kallonmittausten ja frenologian vaikutus sekä matkakirjallisuus. Mortonin rotujen kuvauksia tarkastellaan puolestaan käymällä yksityiskohtaisesti läpi kunkin rodun kuvauksia ja poimimalla niistä keskeisiä kulttuurihistoriallisia teemoja. Lisäksi tarkastellaan Mortonin rotukuvauksissa käyttämiä lähteitä, ja luodaan alustava kuva niiden kirjoittajien kulttuurisista ja sosioekonomisista taustoista, joiden voi ajatella vaikuttaneen heidän kuvauksiinsa vieraista kansoista. Polygenesis-teorian ilmenemistä <i>Crania Americana</i>ssa tarkastellaan aiemman tutkimuksen valossa. Tutkielmassa pyritään osoittamaan, että toisin kuin aiemmassa tutkimuksessa on esitetty, Morton ei alkanut kannattaa polygenesistä yhtäkkiä pian <i>Crania Americana</i>nan julkaisemisen jälkeen.</p> <p>Tutkielmassa nousee esiin, että Mortonin käsitykset ihmisroduista olivat kaikilta osin vahvasti sidoksissa aikansa kulttuurihistorialliseen kontekstiin, sekä luonnontieteilijöiden ja matkakirjailijoiden teksteihin. Mortonin rotujako pohjautui ennen kaikkea saksalaisen professori Blumenbachin 1795 esittämään rotujakoon, ja oli, kuten kaikki muutkin rotujaot, lähtökohtaisesti hierarkkinen. Mortonin rotukuvaukset sisälsivät lukuisia arvottavia stereotypioita, joista monet olivat johdettavissa eurooppalaisten kolonialistien tarpeeseen osoittaa omaa ylemmyyttään ja perustella muiden kansojen alistamista. Tähän liittyen, Mortonin lähteiden kirjoittajat olivat enimmäkseen hänen omia aikalaisiaan, ja brittiläistaustaisia tai ainakin eurooppalaisia, ylemmän tai keskiluokan mihiä. Polygenesis-teoriaa tarkasteltaessa nousi esiin, että Morton ei ollut <i>Crania Americana</i>nan kirjoittamisen aikaan perehtynyt aiheeseen syvällisesti. Toisaalta monet polygenesis-teorian kannalta keskeiset ajatukset, kuten ihmisrotujen erillisyyden hyvin varhaisista ajoista ja tämän todistaminen historiallisten lähteiden avulla, olivat esillä jo <i>Crania Americana</i>ssa.</p>			
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1. Introduction

In this thesis I explore the racial categories, race descriptions and polygenesis in Samuel George Morton's (1799–1851) *Crania Americana; or, A comparative view of the skulls of various aboriginal nations of North and South America. To which is prefixed an essay on the varieties of the human species* (1839). My aim is to show the many ways of how contemporary and historical ideas about race were interwoven in Morton's descriptions and understanding of race in this book, which was also his first anthropological publication. By doing this, I will be making visible the cultural historical background of Morton's anthropological work, which has not received as much attention in the earlier research as his cranial measurements.

In the larger context, Morton's work was part of scientification of racism in the beginning of the 19th century, which was based on a combination of global European colonization, transatlantic slave trade and the Enlightenment ideals, which stated that objective natural sciences could explain the world as it was. These phenomena created both the need and the means to set people apart based on race. This need, in turn, was the basis of many new scientific disciplines, like anthropology, ethnology and archaeology. Thus, racist themes and attitudes were built-in in many of the early works of these disciplines.

One of these early works of was *Crania American*, written by Samuel George Morton, physician and skull collector from Philadelphia Pennsylvania. In the canon of the history of race in America Samuel George Morton has been framed as one of the central figures of the early 19th century. He has been named as one of the founders of scientific anthropology in America and as such, his works have shaped how the human races have been seen both by general public and scientific circles.¹ Morton was also a supporter of the controversial polygenesis theory, which stated that human races had been created separately and were possibly different species all together. Polygenesis theory was also closely connected with defenders of slavery. Due to his historical and political significance, understanding Morton's ideological background is extremely important, as his ideas of race did not develop in a vacuum. Despite the importance of the subject, detailed analyses of the cultural historical and ideological backgrounds of Morton's race

¹ Brace 2005, 81; Brace 1986, 88–89.

theories are almost absent from the research literature. Therefore, studying this side of Morton's work will be both useful and justified.

1.1. Research questions

Morton's work has been studied previously mostly from the perspective of his cranial measurements.² This has been justified by claiming that Morton's most lasting legacy in the history of science was that he was one of the first anthropological researchers to apply relatively consistent scientific methodology in his work. Also Morton himself believed in this empiricist ethos, and the idea that measuring and producing repeatable results would liberate him and his work from political or emotional influences. Contrasting this ideal of objective scientific method, for example, Stephen Gould's re-measurements of Morton's collection have indicated that Morton might have interpreted his cranial measurements in the light of his personal biases. Morton's support for polygenesis theory has also been interpreted to have been inspired by his craniological work, which ignores that polygenesis was part of larger political, historical and cultural phenomenon.³

In order to explore this neglected cultural historical side of Morton's *Crania Americana*, this thesis explores firstly, how contemporary and historical ideas about race are visible in Morton's categorization and description of human races in *Crania Americana*, and secondly, how Morton's position on polygenesis is visible in *Crania Americana*.

In studying Morton's descriptions of races and how he approached polygenesis in *Crania Americana*, I hope to shed light on the ideas behind his ideas and how they sprung from the western racialization of the world. I have chosen to study *Crania Americana* because it includes relatively comparable descriptions of all of Morton's human races, and his explanation of how he ended up using these racial categories. It was also Morton's first major anthropological publication, which makes it a good starting point in analyzing his ideas about race and his

² Smith 2014, 36–38; Weisberg 2014, 177; Lewis, DeGusta et al. 2011, 1–2; *Mismeasure for mismeasure*, Editorial, Nature 474 (June 23. 2011), 419; Mann 2009, 162; Renschler and Monge 2008, 38; Brace 2005, 89; Gould 1996, 83, 86, 100–101; Michael 1988, 354.

³ Smedley 2011, 231; Fabian 2010, 102; Brace 2005, 88–90; Gould 1996, 83, 86.

influences. In some cases, I have used Morton's later texts as comparisons to see how his ideas, especially on polygenesis, had evolved or stayed the same.

My thesis is organized in two parts based on my research questions. The first research question: how the ideas about race were visible in *Crania Americana*, is discussed thematically in the first two chapters. In the first chapter I analyze from different perspectives how theories about race influenced Morton and his system of human races. In the second chapter I will discuss in detail the description of each race in the introductory essay of *Crania Americana*. One of the approaches I use is to go directly to Morton's own sources, and to find out who they were and what was their relationship with the area or subject they were writing about. With this approach I will highlight Morton's connection with the community of Euro-American naturalists and travel authors, and illustrate the collective nature of any scientific project, where the new study is always built on the foundation created by earlier works. Those of Morton's sources, that I have used, have been added to the bibliography so that it will be easier for future researcher to evaluate my work.

The second part of my study will focus on the second research question: how Morton's position on polygenesis was visible in *Crania Americana*. In the third chapter I will discuss how according to polygenesis theory different human races had been created separately and were possibly separate species. Polygenesis was used to argue for racial inequality and continuation of slavery in America. Thus, it relates directly to the racial biases and their social and cultural motivators which have been discussed in the previous two chapters. Morton argued for polygenesis more forcefully in his later works but many of the same ideas were already visible in *Crania Americana*. I will pinpoint these ideas in *Crania Americana* and compare them with Morton's later writings, where he analyzed the subject more thoroughly.

1.2. *Crania Americana* as a source and previous scholarship on Morton

Crania Americana was self-published by Morton simultaneously in Philadelphia and London in 1839. The only edition consisted of 500 copies, but facsimile reprints and reproductions have been published in the 20th and 21st centuries. My study is based on the original 1839 edition.

Crania Americana included the introductory essay to human races, descriptions of Native American skulls in Morton's collection organized by tribe, explanation of Morton's measuring methods, tables of cranial measurements and phrenological essay by phrenologist George Combe (1788–1858). In addition to these the book was richly illustrated with 71 picture plates, most of which were life sized lithographs of skulls in Morton's collection by Philadelphian artist John Collins, and two hundred smaller woodcut illustrations. The book was very expensive to print, and left Morton, who paid all the expenses himself, in a considerable debt. Because of the expenses the price of the book climbed to \$20, which according to Ann Fabian corresponds with around \$500 in modern currency. Fabian points out that because of its high price, *Crania Americana* did not sell very well. Thus, while *Crania Americana* has a reputation as one of the founding works of scientific racism, its effect was far from immediate. Incidentally the one place where *Crania Americana* did sell better was in the American South where Morton's racial hierarchy was used to defend slavery.⁴

Despite *Crania Americana*'s generally poor commercial performance, Morton's work became influential through his contacts with the central scientific figures in America and abroad. Morton had made the book available to naturalists and interested amateurs by sending free copies to prominent individuals and scientific societies, mostly in Europe. Through endorsement of public figures like Alexander von Humboldt (1769–1859) Morton and his work became relatively well known in the circles of his contemporary naturalists.⁵

Of the works inspired by *Crania Americana*, one book especially had enormous effect on Morton's subsequent reputation as an authority in the race questions. The book was *Types of Mankind, or Ethnological researches: based upon the ancient monuments, paintings, sculptures, and crania of races, and upon their natural, geographical, philological and biblical history* (1854) written by Josiah Clark Nott (1804–1873) and George Robins Gliddon (1809–1857). *Types of Mankind* became a classic in the field of scientific racism, with very clear racist and political overtones. It was also a commercial hit and went through ten prints by 1871.⁶

⁴ Fabian 2010, 80–82, 85–90; Brace 2005, 81–82.

⁵ Fabian 2010, 90–91; Brace 2005, 127–128.

⁶ Sussman 2014, 35; Fabian 2010, 111; Mann 2009, 159; Renschler and Monge 2008, 37; Gould 1996, 68.

Nott and Gliddon had been personal friends with Morton and saw themselves as continuers of Morton's work. They used Morton's data to back their interpretations in *Types of Mankind* and the book was dedicated to Morton and it began with a short biography of Morton by Professor Henry S. Patterson. Patterson had gathered positive reviews of *Crania Americana* to this biography. It is possible that when *Types of Mankind* gave Morton his reputation as the scientific authority on human races, the glowing reviews for *Crania Americana* in Patterson's memoir were perhaps partly responsible for conception of *Crania Americana*'s centrality in the minds of later students of racial history.⁷

My study concentrates on the introductory essay of *Crania Americana* called 'The Varieties of the Human Species'. To emphasize the central role of this essay, I have also named my thesis after it. The essay is a scholarly text to which Morton had gathered information about different races and nations from a variety of sources. Even if most studies of Morton have concentrated on his cranial measurements, some writers have commented on Morton's scholarship in this introductory essay. Morton's scholarship has been commented from three different viewpoints in studies. First viewpoint is Morton's contemporaries' opinion about his works. As an example of this, Reverend John Bachman (1790–1874), naturalist from Charleston and Morton's scientific rival, thought that Morton's scholarship was on par with contemporary standards. Bachman, despite their different opinions on polygenesis, complimented Morton's essay in his book *Unity of the Human Race* (1850). In his own words, Bachman thought that it had "as much valuable information on this subject as is contained in any similar work to which we have had access."⁸

The second viewpoint is more critical to Morton. For example, Louis Menand described Morton's depictions of races as "generalizations about the attributes of different races as he had gleaned them from anthropological and travel literature."⁹ Menand's assessment was that Morton had correlated these generalizations with his cranial measurements, and thus formed the hierarchical racial ranking he used. In some form this view to Morton's scholarship seems to be most common among the modern scholars. Same line of thinking can be seen in, perhaps the most influential study about Morton carried out in the 20th century, Stephen Jay Gould's re-

⁷ Fabian 2010, 96–97; Patterson 1854, xxxiii–xxxv.

⁸ Bachman 1850, 116.

⁹ Menand 2001/2002, 110.

measurements of Morton's collection. Key interpretation in his study was that Morton's personal bias had affected the analysis of his cranial measurements, though Gould has himself been accused of making biased conclusions.¹⁰ Also Robert E. Bieder's analysis of Native Americans in Morton's material highlighted how Morton drew generalized conclusions about races from what he knew about their cultures. None of these scholars, however, analyzed these perceived biases or generalizations in detail or provide deeper historical context to them.¹¹

The third viewpoint, more positive to Morton, provided by C. Loring Brace, professor of Anthropology at the University of Michigan, complimented Morton's usage of historical accounts and depictions of travelers as "a major piece of scholarship"¹². He also applauded Morton's professional manner when he disagreed with other scholars like the German doctor and anatomist Johann Friedrich Blumenbach (1752–1840) or the English doctor and ethnologist James Cowles Prichard (1786–1848), without questioning their motives or competence. Brace mentioned that latent racism was one of the main flaws of Morton's anthropology but he counted it as a reflection of the society Morton lived in. He also stated that racial biases had no effect on Morton's anthropological work. Brace argued strongly that Morton's importance as one of the founders of anthropology should be recognized, so arguing that Morton's work was unbiased may be related to the desire to make Morton seem more approachable to modern audience.¹³

My research draws mostly from the second viewpoint, which can be summarized as the general assumption among many scholars that Morton had a group of assumptions or biases, based on travel literature or perceptions of foreign cultures, which he then used to explain the differences he found in his cranial measurements. Despite the general assumption of their existence, little detailed study has been done about these biases or where they came from. I believe that Menand was potentially on the right track when he brought up the role of anthropological and travel literature as major influencer on Morton's perception of different races.¹⁴ The introductory essay

¹⁰ *Against Gould*: Lewis, DeGusta et al. 2011, 1–2; Mann 2009, 162; Renschler and Monge 2008, 38; Michael 1988, 354.

Pro Gould: Weisberg 2014, 177; *Mismeasure for mismeasure*, Editorial, *Nature* 474 (June 23. 2011), 419. *Accounts of the controversy*: Brace 2005, 89; Smith 2014, 36–38.

¹¹ Gould 1996, 100–101; Bieder 1986, 70.

¹² Brace 2005, 82.

¹³ Brace 2005, 88, 90–91.

¹⁴ Menand 2001/2002, 110.

of *Crania Americana* is the longest and most inclusive text based on literary sources which Morton published, and thus it is a logical place to start analyzing the ideas of races and nations Morton had and where they came from.

In the first main chapter of this thesis I analyze Morton's race division from different angles, mirroring them on the history of racial thinking and scientific racism, especially that of the American situation. The picture of the development of scientific racism employed here is based on several respected studies; including Loring C. Brace's "*Race*" is a four-letter word (2005) which has dedicated several chapters to the development of scientific racism in America and Morton's part in it. Another useful study has been Audrey Smedley's *Race in North America: Origin and evolution of a worldview* (1993, 4th ed. 2011). It covers the history of racial thinking in North America on large scale, including Morton and the effect he had on racial thinking in America. Smedley also connects race-thinking and polygenesis to the larger political and cultural contexts of the time.¹⁵ Published in Finnish, Pekka Isaksson's *Kumma Kuvajainen: Rasismi Rotututkimuksessa, Rotuteorioiden Saamelaiset Ja Suomalainen Fyysinen Antropologia* (2001) has been another useful study. It concentrates mainly on Finnish scientific racism and racializing the Sami people in Finland, but in addition to his, the book includes a thorough description of the history and development of scientific racism from the international point of view.

In the second main chapter I focus my studies on Morton's race descriptions and his sources. In studying Morton's sources I have focused my energies on finding as many sources as possible and gathering some facts of their writers. One of the most useful ways of finding rudimentary information about Morton's sources has been through the online version of *Oxford Dictionary of National Biography*, which has a collection of over 60.000 articles¹⁶ of important figures in British history. As sources, national dictionaries like this tend to emphasize figures who have had perceived importance in nation building and the articles themselves are often commemorative in nature.¹⁷ In total I have used 23 separate entries from this dictionary. That so many of Morton's

¹⁵ Fabian 2010, 221, note 2.; Graves 2001, 61; Stanton 1960, 202–203, note 2.

¹⁶ As in April 2019. (Oxford Dictionary of National Biography, Front page, <http://www.oxforddnb.com/> Accessed 5.4.2019.)

¹⁷ Cowman 2016, 89–90.

sources had their own entry in *Oxford Dictionary of National Biography* tells something about nationality and relative social importance or status of these people in the British history.

In the third main chapter I focus on the second research question, Morton's relationship with polygenesis. It has been analyzed most thoroughly by William Stanton in *Leopard's Spots: the Scientific Attitudes Towards Race in America 1815–1859*, published in 1960. According to Stanton, by 1841 Morton's skull measurements had convinced him that the different races were in fact different species. Stanton argued that Morton wanted to use scientific methods to further prove polygenesis. To do this he had to solve two problems related to the generally accepted definition of species. Firstly, a species needed to have common origins, and if humans were of several species, each of them had to have their own separate origins. Secondly, the principle of specific interfertility, which meant that to be of the same species organisms needed to be able to produce fertile offspring. To prove that human races were separate species, Morton had to either prove that different races could not produce fertile offspring or that the interfertility as definition of species was not valid.¹⁸

In Stanton's narrative, the rest of Morton's career was spent in trying to solve these two problems. He described Morton's subsequent publications like *Crania Aegyptiaca* in 1844 and several articles on hybridity of species (1850–1851) as attempts to solve these problems. In the last chapter of the thesis I will argue that Morton's approach to polygenesis can be interpreted differently based on what he wrote about the subject in *Crania Americana*. Especially problematic, in my opinion, is Stanton's implication that as a result of his cranial measurements Morton became convinced about polygenesis between the publication of *Crania Americana* and 1841. My argument is that Morton believed in polygenesis all along, and that most of the ideas which in Stanton's framework were results of the measurements Morton did after *Crania Americana* existed in it already, though perhaps in more rudimentary form.

¹⁸ Stanton 1960, 42–44.

1.3. Samuel George Morton's life and scientific work

This section contains a short description of Morton's personal and professional history, which provides context for the early 19th century scientific world and the intellectual environment where Morton carried out his anthropological work. It is important to understand, that while Morton was not a professional anthropologist, his medical expertise and personal connections, and also his race and social class, all made it possible for him to become a pioneer of physical anthropology. Samuel George Morton, whose father was an Irish immigrant and mother a local Quaker, was born in Philadelphia 1799. Throughout his life Morton suffered from ill health and rarely left Philadelphia after his youth. Having been raised a Quaker, two popular career choices for the young men of his class, a priest and a lawyer, were out of Morton's reach. Though supposed to become a merchant, he disliked "the atmosphere of the counting-house"¹⁹, and so medicine was left as the only more or less pliable option. He gained two medical degrees, the first one in Philadelphia in 1820 and the second one in fashionable Edinburgh in 1823. As American degrees were not highly appreciated in Europe at the time, the latter was financed by his wealthy Irish uncle James Morton.²⁰

In 1824 Morton returned to Philadelphia and began his career as a practicing physician and led an active professional and academic life until his death in 1852. In addition to an active medical practice, he had several teaching positions, holding the chair of anatomy in the Medical Department of Pennsylvanian College between 1839 and 1843. He was also a doctor and clinical teacher at the Alms-House hospital for several years. His active medical practice and an inheritance he got from the previously mentioned uncle in 1840 made his life financially secure and, for example, enabled him to pay the debts he had gained by publishing *Crania Americana*.²¹

During his career Morton held several positions of trust in some of the most important Philadelphian scientific societies of the time. For example, since 1820 he was a member of the Academy of Natural Sciences of Philadelphia²², and served in several positions within it,

¹⁹ Patterson 1854, xxii.

²⁰ Brace 2005, 79; Bieder 1986, 55; Stanton 1960, 25-27; Patterson 1854, xxii-xxiv.

²¹ Fabian 2010, 81, 88-90; Stanton 1960, 27; Patterson 1854, xxvi-xxviii.

²² The Academy had started in the winter of 1812 as an informal group of gentlemen who gathered to discuss about scientific and natural historical topics. (Fabian 2010, 27.)

including the corresponding secretary in 1831, which brought him into contact with many leading scientists of the day, vice president in 1840, and the president in 1851. Many sources, including Patterson and Stanton, emphasize that Morton was liked among his peers and that he relied on his many contacts while collecting skulls from all over the world instead of traveling to gather them himself.²³

Ann Fabian has in her book *Skull collectors* (2010) emphasized the importance of Morton's scientific connections and friendships in spreading the word about his cranial studies and creating his reputation as an anthropological pioneer. Some of these friends formed with Morton an informal group which has been known in the history of racial thinking as 'the American School of Anthropology'.²⁴ Morton's most important connections were with *Types of Mankind* authors Josiah Nott and George R. Gliddon, and with Swiss born Louis Agassiz (1807–1873), a Harvard professor, popular lecturer and founder-director of Harvard's Museum of Comparative Zoology. Also, when studying in Edinburgh, Morton had probably come to contact with popular pseudoscience phrenology. One of the leading phrenologists was a Scottish lawyer George Combe, who was also Morton's good friend and tried to help him promote *Crania Americana*. Fabian described the community formed by these men and other venerable anatomists in America and Europe as an affectionate circle, where ideas and specimens exchanged hands in brotherly comradery.²⁵

In addition to his networking skills, Morton's reputation benefitted from the fact that he was very productive writer. During the twelve years between publishing *Crania Americana* and his death in 1851 he published at least 20 articles, letters and books, which had something to do with

²³ Brace 2005, 80; Fabian 2010, 27, 115; Stanton 1960, 27–28; Patterson 1854, xviii–xxi, xxiii, xxviii.

²⁴ Smith 2014 and Lemire 2010 call the group *the American School of Ethnology* while the other sources, including Stanton 1960, Brace 2005 and Fabian 2010, use *the American School of Anthropology*. While the latter seems to be the established term nowadays, it is worth of noting that at the time Morton was writing his works the terms ethnology and anthropology were still somewhat interchangeable. Note for example *the American Ethnological Society* where Morton was an active member for many years and used it as a platform to present his theories about human races. In his Memoir of Morton, Professor Henry S. Patterson compliments Morton's "Anthropological" research, remarking that it ran from "Comparative Craniology" to "general Ethnology". (Patterson 1854, xxviii.); see also Isaksson 2001, 70.

²⁵ Fabian 2010, 91–92, 95–97, 103, 112; Brace 2005, 93.

anthropology.²⁶ His articles and letters were published in several scientific journals, including *American Journal of Science* and *the Boston Journal of Natural History*. As a doctor, he also wrote, co-wrote and edited several books about medicine. These include for example *Illustrations of pulmonary consumption* (1834) and *An Illustrated system of human anatomy* (1849).²⁷ Before he started gaining fame as an anthropologist, he had published several articles about geology, paleontology and zoology, including *Synopsis of the organic remains of the Cretaceous group of the United States* (1834).²⁸ He did not abandon these interests after he began gaining fame as an anthropologist.²⁹ According to Brace's estimation, Morton's contributions to these subjects were on par with the best scholarship of the day.³⁰

Morton's most significant contribution to science was, however, his leading role in the founding of anthropology as a modern science. Today he is best known for his "American Golgotha", a collection of over 1 000 human skulls which he had collected with help from his contacts from all over the world. Morton never did fieldwork himself, which was not uncommon at the time. He cleaned the skulls and did the measuring himself, as he could not find assistants who were reliable enough to produce consistent measurements. Morton introduced the comparing of human biological forms in metrics, and because of this he can be seen as one of the founders of the scientific field of biological anthropology. Many measuring techniques, including measuring the internal capacity of the skull which was central to many of Morton's theories, were designed by his friend Mr. J.S. Phillips. Morton wrote on several occasions about how important it was for him to try to keep his work as objective and scientific as possible. Unlike other more philosophical polygenists, he aimed to prove his theories through empirical measuring, not by deducing them from philosophy, politics or religion. This approach has brought to Morton the

²⁶ Morton 1841a; Morton 1841b; Morton 1842; Morton 1843; Morton 1844b; Morton 1844c; Morton 1846; Morton 1847; Morton 1848; Morton 1849b; Morton 1849c; Morton 1850c; Morton 1850d; Morton 1850e; Morton 1851a; Morton 1851b; Morton 1852; Morton 1854.

²⁷ Morton 1834a; Morton 1849d.

²⁸ Morton 1834b.

²⁹ Morton 1850a; Morton 1850b; Morton 1844a; Morton 1849a.

³⁰ Brace 2005, 80; Stanton 1960, 26.

questionable honor of being viewed by some as the father of “scientific” racism, because he helped to associate the perceived neutrality of science to racial questions.³¹

Morton died in 1851, quite suddenly despite the ill health he had suffered from throughout his whole life. His sudden death left the American School of Anthropology leaderless just as its principal doctrines had been established. Morton’s own work on human races was also left largely unfinished. Later Morton’s scientific legacy became tarnished by the associations it had with institutionalized racism. Brace points out that Morton’s scientific legacy continued in the European tradition, which culminated in the formation of biological anthropology. Morton’s reputation was however so tarnished by his association with the slavery debate that his pioneering part in the foundation of this tradition has not been recognized until recently.³²

³¹ Fabian 2010, 2; Lemire 2010, 113; Mann 2009, 160; Renschler and Monge 2008, 34; Brace 2005, 81–82; Dain 2002, 198; Stanton 1960, 28; Morton 1849c, 221; Morton 1839, 253.

³² Brace 2005, 91–92; Stanton 1960, 145, 155.

2. Morton's division of human races in *Crania Americana*

In this chapter I concentrate on the question: how Morton's contemporary and historical ideas about race were visible in his categorization and description of human races in *Crania Americana*. The focus is on the first part of the question: which were the wider international and cultural ideas of race that existed at Morton's lifetime and how they affected the formation of his racial categories. I approach Morton's race division from several angles. After the short introduction to the history of racial thinking, the four following sections in this chapter concentrate on different aspects of Morton's race formation process. The first section focuses on Morton's relations with the earlier theories of human races and how he set his own division in this continuum. Detailed descriptions of other race systems are part of this section because Morton himself described the in *Crania Americana* before explaining his own choices in the matter. The second section examines the hierarchical nature of Morton's race system. Morton himself did not emphasize the hierarchy of races, at least not in *Crania Americana*, but it has played a central role in the application of his studies to the real world. This theme rises starkly from the literature; all authors I have read have agreed that Morton's race system was hierarchical.³³

The third section concentrates on Morton's cranial measurements. I study the history of cranial measuring, and how and why Morton believed that he could gain meaningful results and information from them. Cranial measurements are closely related to phrenology, which according to some scholars influenced Morton's work. The chapter concludes in the fourth section, where I discuss the literary sources Morton used for the descriptions of human races and nations in *Crania Americana*. Here the central themes are historical aspects of the travel accounts and their importance to the early anthropology and ethnology. This last section serves also as an introduction to the next chapter where I study the second part of the first research question: the ideas which composed the descriptions of races in *Crania Americana*.

³³ Smedley 2011, 232; Fabian 2010, 83; Brace 2005, 91; Bieder 1986, 69–70; Stanton 1960, 35.

2.1. Formation of racial worldview and the dawn of scientific racism

Increasing knowledge of different animals, plants and nations with which Europeans came in contact as they spread all over the world increased the need to classify and explain the perceived differences. The single most influential phenomenon in this process, which created the need to classify humans, was the transatlantic slave trade. At least in British colonies it resulted in race-based slavery by the end of the 17th century and consequently European born slave owners started to identify as 'white' to separate themselves from their mostly dark-skinned slaves. Native Americans on their turn were described as red skinned only after slaves had started to arrive in America. The word race, which had previously had a more flexible meaning and had been used synonymously with words like tribe, nation, kind or species, began to be used by 18th century naturalists in a narrower biological sense. While this was the general direction, the terminology in early anthropology was often undefined, and biological and cultural inheritances were not seen as strictly separate.³⁴

Among the pioneers of classifying humans was the Swedish botanist Carl von Linné or Carolus Linnaeus (1707–1778). He brought along the ideas of nature's classification, the fixity of species and that human beings belonged to the same natural continuum with the lower animals. Another influential thinker in the early classification of humanity was Linnaeus' rival, the famous French naturalist Georges Louis Leclerc, Comte de Buffon (1707–1788) who popularized discussing human races, though he used the word more in the cultural than in the biological sense. Environmentalism was a popular Enlightenment explanation for the differences between human races. In this case environment included not only the climate and physical environment but also social environment or state of society, which could either correct or emphasize the degenerating effects of physical surroundings. Environmentalist degeneration theory was objected by many Americans, including Samuel George Morton. They opposed especially the idea, advocated by Comte de Buffon, that the American environment caused degeneration, as it implicitly meant that

³⁴ Smedley 2011, 35–39; Huigen 2009, 22; Douglas 2008a, 34–35; Isaksson 2001, 55–58; Berkhofer 1978, 39.

white Americans would also degenerate when enough time had passed from their coming to America.³⁵

From the late 18th century onwards hereditary determinism became an increasingly important component in the idea of race. The racial features, which included both physical features and cultural behavior, were seen as hereditary, and were not affected by environment or social surroundings. This led to biologization of history, which meant that all cultural historical features were explained by race. The universality of human behavior was largely ignored and both achievements and failures were explained primarily by race. This chain of ideas was partly influenced by the 18th century classifications which had created an illusion of permanent, clear differences between human groups. Classifications were easy to place in hierarchical order, which implicated inequality between different groups. For this specific reason some Enlightenment philosophers like Leibnitz had opposed putting races in hierarchical order. All these features in the formation process of the ideas of race and racial classifications attributed to the birth of formalized scientific racism.³⁶

Robert Berkhofer has defined racism as specific social doctrine which assumed that human differences were based on mainly in biology which controlled moral traits. Unlike ethnocentric judgement, which according to Berkhofer was universal, racism was invented by Europeans during their expansion in the early modern times. In the 19th century the scientification of racism took place. Formerly, racism had been based on folk wisdom about the differences between races. Previous unsystematic racial prejudice against people who were different from Europeans became racism that was systematic and fairly consistent. According to Smedley, Morton's work played a role in the larger phenomenon of making and confirming the folk beliefs of white superiority with scientific evidence. Racism and the idea of black inferiority thus became the norm in the scientific world of the 19th century. Stanton writes that in 1847 one American natural scientist excused slavery because, as he saw it, the modern science had proved that the black people had reached their highest potential.³⁷

³⁵ Douglas 2008a, 35–37; Brace 2005, 24–27; Isaksson 2001, 45; Gossett 1997, 3, 35; Bieder 1986, 3–12; Berkhofer 1978, 40–44; Stanton 1960, 34.

³⁶ Smedley 2011, 173, 222–223; Gossett 1997, 34; Berkhofer 1978, 55–56.

³⁷ Smedley 2011, 277, 232; Huigen 2009, 22; Berkhofer 1978, 55–56; Stanton 1960, 80–81.

Arranging human races in hierarchical order had strong tradition in European natural history; most racial categorizations before Morton had been hierarchical. Also, naturalists like Linnaeus, Buffon and Blumenbach, who believed that all human races belonged to same species, believed in the Great Chain of Being or *scala naturae*. This idea had its roots in Neoplatonism from where it had found its way into Christian philosophy. The principle of *scala naturae* was that all beings had been created to mirror Gods perfect ideas and were a part of the divine hierarchical order. By arranging animals and humans into hierarchical order the naturalists were essentially uncovering God's work.³⁸

Some naturalists went further with utilizing *scala naturae*. For example, the English surgeon Charles White (1728–1813) had arranged all humans and animals into a great chain of being in 1799. In his chain black people were an intermediate species between white people and apes. Sir William Lawrence (1783–1867) of the Royal College of Surgeons in London was one of the first to put nations inside Europe in intellectual order. He also believed that intellectually black people were closer to apes than white men. Cuvier had argued that his races, Caucasian, Mongolian and Ethiopian, were in hierarchical order, and that black people were the lowest and closest to apes. In other words, he connected race with the degree of civilization and thus anticipated the causal deterministic relations between the two that would be connected in later theories.³⁹

2.2. Morton's races

Morton was very conscious of the contemporary discussions of race and wanted to tie his work in it to that of the other authorities. Thus, he began *Crania Americana* with an essay called 'Introductory essay on the Varieties of the Human Species'. In it he approached the subject of human races by pointing out how strange it was that humans all around the world seemed to be living in conditions that suited them best. Morton named this distribution of human species to all corners of the world and in all environmental zones as "one of the most interesting problems in history"⁴⁰. First, he described how earlier naturalists had tried to solve this problem. Morton

³⁸ Brace 2005, 27–32.

³⁹ Keevak 2011, 71; Brace 2005, 65; Isaksson 2001, 45, 49, 76–77; Gossett 1997, 47–51, 56–57.

⁴⁰ Morton 1839, 1.

began with Linnaeus, who had divided humans into five varieties, which Morton called races in *Crania Americana* even though Linnaeus himself had not used the term. They were divided geographically following earlier 17th century idea and were called *H. sapiens europaeus*, *H. sapiens asiaticus*, *H. sapiens americanus* and *H. sapiens afer*, referring to Africa. The fifth variety was formed by the fantastical humanlike creatures which were often mentioned in tales but which he had not seen himself.⁴¹

Buffon, according to Morton, had separated humans into six or later five races: Hyperboreans or Laplanders, Tartars, Southern Asiatic people, Europeans, Ethiopians and Americans. Buffon had not described these groups as distinct races, unlike Morton implied: Though he used the term race, he struggled with the concept of it and thought that ultimately, all humans belonged to the same continuity, though some were more developed than others. Making clear-cut distinctions between different races was therefore difficult. Those known as Buffon's "races" have been constructed afterwards from his descriptions of nations which were arranged by these areas.⁴²

Inspired by Buffon, Morton noted, Blumenbach had separated humans into five varieties: Caucasian, Mongolian, Ethiopian, American and Malay in his *De Generis Humani Varietate Nativa* (1795). Like Buffon, Blumenbach thought that making clear divisions between varieties was a matter of taste. Blumenbach used specifically the word 'variety' to make the point that the limits between the types were fluid. Morton, who believed that races were strictly separate, preferred the word 'race' instead of 'variety'. Despite of this, he had named the introductory essay of *Crania Americana* 'the Varieties of the Human Species', probably to show the close connection his work had with Blumenbach, despite their differences of opinion. Morton also mentioned the director of the Museum of Natural History of Paris Georges Cuvier (1769–1832), who had used Blumenbach's races as a starting point but simplified them to three main categories: white/Caucasian, yellow/Mongolian and black/Ethiopian. Last of Morton's examples was the French geographer Conrad Malte-Brun (1755–1826), who had divided humanity into sixteen races.⁴³

⁴¹ Smedley 2011, 218–219; Brace 2005, 27; Morton 1839, 1–3.

⁴² Smedley 2011, 219–220; Brace 2005, 30–32; Isaksson 2001, 47–48; Morton 1839, 3.

⁴³ Keevak 2011, 71; Smedley 2011, 218; Douglas 2008b, 109, 115–116, 118; Brace 2005, 44, 83; Isaksson 2001, 45, 49, 76–77; Morton 1839, 3–4.

Morton did not include German philosopher Immanuel Kant (1724–1804), whom several authors mention as an important influencer in the development of the concept of race. Kant theorized that races were permanent and hereditary divisions in the one human species which had a common origin. Different races had degenerated from the original race, to which the white race was closest. Kant had named his four races in 1775 as white, Negro, Hun and Hindu, and in 1777 changed the names to: noble blond (North Europe), copper red (America), black (Senegambia) and olive-yellow (Asia-India).⁴⁴

Morton used Blumenbach's five varieties in the following order: Caucasian, Mongolian, American, Malay and Ethiopian. Morton's opinion of Blumenbach's system was that it was "the most complete that has hitherto been attempted"⁴⁵, even if it was not perfect. In a footnote Morton explained that he had substituted Blumenbach's word 'variety' with 'race' and changed the order of the races, though he did not explain the reason behind the changes. Brace analyses that for Morton race meant that the groups were categorically different and unrelated. The term variety originated from Linnaeus and held a strong implication that all humans were ultimately just varieties of one unchanging species. The difference was also visible in the explanations of the differences between human groups. Blumenbach had believed that differences between varieties were caused by degeneration; Morton believed that all races had been originally adapted to their local destinations.⁴⁶

Morton wrote that his race division was based on the idea that each race had their own physical and moral traits which had existed largely unchanged from the earliest history.⁴⁷ Morton also noted that two main methods had been used to form the racial groupings: physical features and ethnographic data. Ethnographic data meant in this case the data gathered from the study of languages and of their relations to each other. Berkhofer points out that the mixing of biological

⁴⁴ Huigen 2009, 22; Douglas 2008b, 104, 125; Zammito 2006, 40–43; Brace 2005, 44; Isaksson 2001, 49–50.

⁴⁵ Morton 1839, 5.

⁴⁶ Brace 2005, 83; Morton 1839, 1–3, 5; Blumenbach 1795, 289–295.

⁴⁷ As examples Morton mentioned Arabians, Hindus, black people and Jews, who he thought were all recognisable from different depictions from several thousands of years in the past. Morton did not specify which depictions he meant except for Jews, who he wrote were recognisable from almost 3000 years old Egyptian sculptures. (Morton 1839, 1–2.)

and cultural inheritance in defining and separating races was typical for the early stage of anthropology. Linnaeus had also used similarly mixed criteria in his race division.⁴⁸

Morton followed this principle in *Crania Americana* when he proposed that the best categorization of human races would be achieved by combining the two approaches. He wrote that the five races should be further divided into 22 families. Families in this context were groups that shared physical and moral traits and a language. According to Morton, some of these families were closer to the five original races and others were more recently formed mixes of them. Each family was in turn divided into branches, which were divided in national groups.⁴⁹ To make Morton's racial division in *Crania Americana* easier to understand, I have arranged the races into a table which is available as an appendix.

In a footnote of an article about hybridity, published in 1847, Morton expanded his theory of racial categories. He suggested that the primary level of creation was what he called primary races which in turn formed several higher-level groups: the five races of Blumenbach. These groups had in common larger geographical origins and similar physical and moral traits, but their subgroups, the primary races, were created in separate locations and could be arranged hierarchically in relation to each other. Morton used the American family as an example: the Toltecan nations were the highest and the Fuegians the lowest in hierarchy. Based on this, Morton's primary races corresponded with what he had called branches in *Crania Americana*.⁵⁰

Morton did not develop this theory further during his lifetime. However, it seems that he thought that this theory was at least somewhat important, because the same footnote was added to several of his publications which handled the topic of human races. One of these was the unfinished Manuscript B, published in *the Types of Mankind*, which also included some new material about different races in the same fashion as the introductory essay of *Crania Americana*. An interesting feature in this partial remodeling of his human classification system was that unlike in *Crania*

⁴⁸ Smedley 2011, 218–219; Berkhofer 1978, 55–57.

⁴⁹ Morton 1839, 4–5.

⁵⁰ Morton 1847, 40.

Americana, Morton stated here outright that different human groups could be arranged in hierarchical order. This topic is discussed in the next section.⁵¹

2.3. Ranking of races

In the literature there is an overall agreement that Morton's races were in hierarchical order, even though Morton did not articulate this explicitly in his texts. The scholars have emphasized different aspects of this hierarchy, from its cultural or political origins to the effect it had on how Morton's races were used later, namely to justify slavery. For example, Stanton recognized that Morton's races were hierarchical at least in practice, if not explicitly in name. He connected this to phrenology where characteristics of individuals were interpreted from their skull shape. This side of Morton's races is analyzed in more detail in the following section. Brace in turn noted that there was racism in Morton's race hierarchy, but he pointed out that racism was inherent in all race systems of Morton's predecessors, like those of Blumenbach, Pritchard and Samuel Stanhope Smith (1751–1819), who was an early American philosopher of race and supporter of monogenesis. Brace's opinion echoed his argument about the relative excellence of Morton's scholarly work in the introductory essay. He stated that ethnocentric racism was so inherent in all early anthropology, that Morton should not be held more responsible for it than any other.⁵²

Instead of blaming Morton for his racism or trying to exonerate him, some scholars have emphasized the political aspect of racial hierarchy, which was especially potent in the United States in the decades before the Civil War. This was also the time period when Morton wrote and published *Crania Americana*. In the literature several authors bring up Morton's contemporary political situation as one of the background factors which shaped his opinions about human races. Smedley for example, compares Morton to several 20th century researchers who tried to scientifically prove the inferiority of the black people. According to her, writers like Morton have

⁵¹ Morton 1847, 40; the same footnote was published Morton 1849c, 223; and Morton 1854, 306.

⁵² Brace 2005, 51–52, 91; Stanton 1960, 35.

often reacted to the improving social situation of black Americans, for example in Morton's case to the rise of the abolition movement.⁵³

Fabian pointed out that worsening race relations and sporadic violent attacks towards black citizens and abolitionists were a visible part of life in Philadelphia during the late 1830's when Morton was writing *Crania Americana*. According to Fabian, Morton at least partially used the empirical methodology because he believed that thus he would get neutral results and avoid or rise above the political questions associated with studying human races. Avoiding politics was not easy in 1830s Philadelphia however, as political questions inevitably affected Morton in his everyday life. For example, many abolitionists used the same printer with him, so he would have seen their works in the print shop. Berkhofer in turn connected Morton's cranial measurements directly to excusing the contemporary oppressing policies towards both black and Native American people.⁵⁴

Though Morton did not explicitly state that his races were in hierarchical order, some features in *Crania Americana* and in his later publications, support the idea that he believed in the inherent hierarchy of races. For example, Morton believed that the races had fundamentally different defining qualities and these qualities could be put in order from best to worst. One of the most striking examples was the description of the average intelligence of each race. Morton stated that Caucasians were distinguished from other races due to their "the highest intellectual endowments",⁵⁵ The intellectual character of the Mongolian race was described as "ingenious, imitative, and highly susceptible to cultivation",⁵⁶ the American race on the contrary was "averse to cultivation, and slow in acquiring knowledge; restless, revengeful, and fond of war",⁵⁷ and the Ethiopian race was mentioned last, as having "a singular diversity of intellectual character, of which the far extreme is the lowest grade of humanity."⁵⁸

Morton explained these assumed differences in intelligence in an introductory lecture in Pennsylvania Medical College, November 1. 1842. The lecture was published the same year

⁵³ Smedley 2011, 248, footnote 5.

⁵⁴ Fabian 2010, 99–102, 116; Berkhofer 1978, 58–59.

⁵⁵ Morton 1839, 5.

⁵⁶ Morton 1839, 5.

⁵⁷ Morton 1839, 6.

⁵⁸ Morton 1839, 7.

under the name *Brief Remarks on the Diversities of the Human Species, and on some Kindred Subjects*. In this lecture Morton further explained the reasoning behind his views about the relative intelligence of different races. According to him, the intellectual abilities of humans made us close to divine. In northern latitudes, above the tropic of Cancer, the conditions were the most favorable to intelligence but more south you went, less intelligence people generally had. Therefore, the Australian Aboriginals were the lowest in Morton's hierarchy. Natives of the southernmost parts of Americas came as a close second. According to Morton, heat was partially the reason why intelligence did not flourish in the south. A more important reason, however, was that the Caucasian race had been simply gifted by God with the best mental abilities. This was proved for example, by how Caucasians had colonized every habitable place on Earth unlike any other race. In *Crania Americana* Morton had dismissed the common theory that environment had shaped the human races, but here, on the contrary, he seemed to accept it as a partial reason to why people from southern latitudes were, in his opinion, less prone to practice their intelligence than the people of the north.⁵⁹

Another implication of hierarchy in Morton's races was that he had used Blumenbach's varieties as the basis of his own division but changed the order of races. Morton had moved the Ethiopian race from third to the place of the least developed race. Blumenbach's racial division had been hierarchical as well, but more complex than a straightforward ascending hierarchy. Blumenbach believed in monogenism, which meant that all human races had common origin, and that the differences in humans were ultimately caused by degeneration. According to him, Caucasians were the least degenerated variety, and Ethiopians and Mongols the most. Malays and Americans were somewhere in the middle. All varieties belonged, however, to the same continuum and Blumenbach believed that drawing lines between different varieties was ultimately a matter of taste.⁶⁰ (Table 1.)

⁵⁹ Morton 1842, 19–22; Morton 1839, 2–3.

⁶⁰ Brace 2005, 46; Blumenbach 1795, 286–287.

Table 1.

Blumenbach's hierarchy of the human varieties, arrows show the direction of degeneration. (*De generis humani varietate nativa*, 1795)⁶¹

Mongolian ← American ← Caucasian → Malay → Ethiopian

The implication of Morton's change of order was that the blacks were the lowest race, as they had been in most previous racial hierarchies. Like Smedley and Fabian have pointed out, socio-political reasons were very likely at least partially the reason behind Morton's views on the black race, and thus also this rearrangement whether Morton acknowledged it himself or not. Morton repeated this notion of black inferiority few years later in *Brief Remarks* where he used black people and Caucasians as examples of the most extreme physical differences between two human races. He wrote that the same principles did apply to the other permanent varieties of mankind as well, but he believed that the differences between them were less pronounced. When he referred to permanent varieties of humanity, Morton nodded towards polygenism, a theory that human races were separate, permanent and had been so from the beginning of time. The idea of polygenesis was adapted at the time by some anti-abolitionists, who argued that if races were originally separate, they could also be treated differently. Morton's relationship with polygenesis is studied in detail in the last chapter of the thesis.⁶²

It is noteworthy however, that while polygenism was associated more closely with racial inequality and supporting slavery, supporting monogenism did not mean that one believed in racial equality either. For example, Reverend John Bachman, who was Morton's opponent in the polygenesis question and who, unlike Morton, believed that all humans belonged to the same species, still agreed with him that white and black people were the extremes of the human races. Bachman conceded that in his opinion, it was possible that by studying only black and white races, it was possible to come to the erroneous conclusion that the human races were separate species. So Bachman, despite believing in the unity of the human species, did not believe in equality within this species. For example, one of Bachman's arguments against Morton's 'theory

⁶¹ Blumenbach 1795, 286–287.

⁶² Smedley 2011, 236, 248; Fabian 2010, 100; Morton 1842, 11.

of repugnance'⁶³, was that the black people in Africa were reluctant to mix with white people because they were jealous of the white people's natural superiority, not because they belonged to different species.⁶⁴

Over all there are two layers in the discussion about hierarchy in Morton's races. First is the one, where Morton discussed about the themes which were current in the contemporary scientific discourse, and the other is where later historians have put Morton's core ideas into wider political context. Because Morton did not, and according to Fabian did not want to, connect his work to the contemporary political situation, it is to a degree necessary to speculate what Morton actually meant when he wrote certain things about races, or what his influences were. Reading Morton's texts about the hierarchy of races from the different points of his career confirms however, that he consistently believed that the differences he perceived between human races put them into hierarchical order where Caucasian were the highest and Ethiopians the lowest race. Even though Morton's explanations for these differences changed somewhat over time, the hierarchy itself did not change. Also, it is possible that, like Brace points out, hierarchy had been an inherent component in every race system before Morton, so possibly there was no need to articulate its existence to Morton's intended audience. At the same time the subject has been intriguing to later scholars who have tried to abridge the apparent gap between the obvious hierarchy of Morton's races and his unwillingness to articulate it.

2.4. Skull measuring and the impact of phrenology

The most famous dataset behind Morton's theories about human races were his skull measurements, especially the internal measurements, which gave him the supposed volume of the brain. These measurements have been studied more than anything else in Morton's works, and it can be said that the measurements have been the most resilient part of Morton's scientific legacy. They are associated with Morton's reputation as a developer of the empirical scientific

⁶³ In which Morton stated that different human races were naturally reluctant to reproduce with each other, indicating that they were actually different species. (Morton 1847, 210–211.)

⁶⁴ Bachman 1850, 23–24, 105.

methodology, principles of which are still at use in the modern natural sciences. In reference to this reputation, Stephen Gould called him ‘the fact collector’ of the American School.⁶⁵

Morton was by no means the first to measure crania for the purpose of racial categorization. Measuring skulls was one of the most popular ways of providing scientific proof of pre-existing ideas about racial differences. Large brains were often considered to be an indicator of intelligence and relatively developed status of an individual. Like many others, Blumenbach had believed that different races had distinct skull shapes and other features of crania. Blumenbach emphasized the shape of skull rather than size, but also noted that Caucasians had the most beautiful skulls. Prichard thought cranial variations existed between species, not between variations of the same species like the human races. He thought variations were caused by environment, not by racial determination and despised phrenology. Morton admired Prichard, to the extent of dedicating half of the copies of *Crania Americana* to him, but disagreed with him on environments role in the shaping of humans in general.⁶⁶

Before Morton one of the most popular cranial measurements had been Dutch anatomist Pieter Camper’s (1722–1789) facial angle, which formed between the lines drawn from the forehead to the upper lip and from the ear opening to the upper lip. A contemporary to Morton’s measurements was the cephalic index which had been devised in 1842 by a Swedish anthropologist and craniologist Anders Retzius (1796–1860). After Morton, Paul Broca (1824–1880), who founded Société d’Anthropologie de Paris in 1859, and his students tried to prove explicit connections between physical features of skull and intelligence. They also connected this to the race and racial hierarchy. Modern studies, beginning with Franz Boas (1858–1924) in the early 20th century, have shown that even though cranial form is largely shaped by genetics, it can change because of environmental factors and is not therefore a reliable method of determining a person’s race.⁶⁷

⁶⁵ Fabian 2010, 15; Gould 1996, 83.

⁶⁶ The other half was dedicated to Morton’s uncle James Morton who had paid for his education in Scotland and had helped to finance the publication of *Crania Americana*. (Fabian 2010, 89–90.); Keevak 2011, 68–69; Bieder 1986, 63; Berkhofer 1978, 57–58; Blumenbach 1795, 197–211, translation in Bendyshe 1865, 234–238.

⁶⁷ Conklin 2013, 26; Eller 2016, 48; Mann 2009, 160; Brace 2005, 32, 144–158, 167; Gravlee, Bernard and Leonard 2003, 326–331.

Morton's scientific methods gave his work scientific credibility and thus gave his conclusions credibility. During the writing of *Crania Americana* Morton's collection contained 256 human skulls, which he had measured, analyzed, and published the results. I have recreated part of Morton's results in Table 2. below. The numbers show that according to Morton's measurements the mean internal capacity of the crania, measured in cubic inches, was largest in Caucasian and smallest in Ethiopian race. Though this difference became central later in Morton's descriptions of racial differences, he did not point it out in the short description that accompanied the measurement results in *Crania Americana*.⁶⁸

Table 2. The skulls in Morton's collection during the writing of <i>Crania Americana</i> (1839). ⁶⁹		
Race	Number of skulls	Mean internal capacity, in ³
Caucasian	52	87
Mongolian	10	83
Malay	18	81
American	147	80
Ethiopian	29	73
All races	256	not calculated

Despite the air of scientific objectivity, several problems in Morton's collection affected the comparability of his cranial capacity measurements. Ann Fabian who has studied Morton's collecting process notes that Morton did not always choose the skulls in his collection to be most representative of each race, but for example favored skulls of famous people over commoners and male skulls over female skulls. Stephen Gould points out that Morton did not properly account for sex and stature of people whose skulls he was measuring, which partly explains the low mean capacity of the black skulls.⁷⁰

⁶⁸ Morton 1839, 260–261.

⁶⁹ Morton 1839, 260–261.

⁷⁰ Smedley 2011, 231–232; Fabian 2003, 124; Gould 1996, 83, 100–101; Morton 1842, 14–15.

Morton presented similar results in *Brief Remarks*, where he wrote that the brains of the human races tended to grow smaller when going down of the list of five races of men. The mean capacities were a bit larger than in *Crania Americana*, but the relative order of the races was the same: Caucasians had the largest mean with 90 cubic inches or upwards while Ethiopians had the mean of 85 cubic inches.⁷¹ Despite these results, those who have studied Morton have had different opinions of how meaningful this difference was to Morton. Stanton stated that “Morton never equated cranial capacity and intelligence”⁷². Smedley had the exact opposite opinion: according to her Morton had assumed that brain size and intelligence correlated.⁷³ Morton commented the issue for example in *Brief Remarks*:

The large portion which the cranium bears to the face in man, is very remarkable, and has even been assumed as a criterion of the relative intelligence of the different races. It is true that these proportions differ in whole nations; and it is incontestible [sic] fact, that the most intellectual nations have the largest and most beautiful heads.⁷⁴

From this statement it is possible to conclude that Morton saw at least a strong correlation between intelligence and the physical size of the human brain. Thus, Smedley’s assessment seems to be more accurate. It is also noteworthy that Morton described the skulls of intelligent nations as the most beautiful. This contemporarily close relationship between hierarchy and aesthetics is discussed in more detail in the following segment about Morton’s literary sources.

The connection between brain size and intelligence was one of the basic principles of phrenology, popular early 19th century pseudo-science. *Crania Americana* included a phrenological chart and essay, written by George Combe, a famous phrenologist who had happened to be in the USA when Morton was composing his work. Phrenology was founded on the idea that the mind was situated in the brain, which size and shape reflected the intelligence and moral traits of an individual. In practice phrenology was analysis of measurements, shapes and bumps of the skull, which in turn reflected the features of the brain they contained. Phrenology was popular for a

⁷¹ Morton 1842, 14–15.

⁷² Stanton 1960, 35.

⁷³ Smedley 2011, 231.

⁷⁴ Morton 1842, 14.

relatively short period of time from the beginning of the 19th century to 1830's before it began to decline, and had practically ceased to exist in late 1850's. Despite this, phrenology had strong impact on new sciences of the time, like anthropology.⁷⁵

Opinions on how much phrenology had affected Morton's work differ in the literature. Stanton dismissed the idea that phrenology had any direct impact on Morton's cranial analysis. He suggests that Morton had added the phrenological chart and essay to his work mainly because phrenology was widely popular among masses at the time, and because he could not outright prove it right or wrong. Bieder thought that the situation was more complex. While Morton never fully affirmed his support to phrenology, he saw this as an example of Morton's hesitance to explicitly support any theory, rather than an example of his opposition to phrenology.⁷⁶

While Morton did not practice phrenology himself, he had probably already come in touch with it when he studied in Scotland in early 1820's. He had been in close contact with some of its leading developers while in Europe, including the founder of phrenology, a Viennese doctor Franz Joseph Gall (1758–1828). Brace pointed out that Morton's 'flirtation with phrenology' has been one of the main reasons why his work has often been dismissed by later scientific generations. I believe this could have been the reason why Stanton wanted to downplay Morton's connection with phrenology when he tried to bring Morton and the American school back to the awareness of scientific community in 1960.⁷⁷

Without a doubt, Morton used at least some phrenologist assumptions when he formed conclusions from his cranial measurements. One of these assumptions was correlating the size and shape of crania with intelligence and other mental abilities as mentioned above. That larger brains, or in Morton's case larger brain cavities, correlated with higher level of intelligence was a phrenological principle. Correspondingly, Morton arranged his races according their cranial size, as is visible from Table 2., and incidentally this order correlated with their assumed levels of intelligence. Phrenology and craniology, the cranial measuring which Morton practiced, shared also methodology, at least on the principle level of taking comparable measurements from skulls. Thus, even if Morton did not whole heartedly believe in phrenology, it is difficult to believe that

⁷⁵ Smedley 2011, 231; Bieder 1986, 70, 73; Erickson 1974, 92.

⁷⁶ Bieder 1986, 71, 73; Stanton 1960, 37–38.

⁷⁷ Mann 2009, 160; Brace 2005, 66, 68, 90; Bieder 1986, 57, 59.

phrenology did not affect Morton in anyway. This makes Bieder's opinion, that Morton did not want to disclose his support of phrenology, more believable than Stanton's analysis that phrenology did not have any effect on Morton's craniological work at all. Bieder did not analyze how exactly phrenology influenced Morton's work and this could be an interesting topic for future research.

Studying Morton's relationship with phrenology could be a good research subject also because phrenology clearly had some impact on Morton's thinking, he even confirmed it himself. In *Brief Remarks* he wrote that he believed in the basic phrenological principles, like that brains are the seat of mind and that they are formed by organs which perform separate functions. He called these propositions 'physiological truths'. Despite these acknowledgments, Morton was cautious of phrenological interpretation. He wrote that it was difficult to specifically locate these organs which were inside of the head and thus difficult to reach. Analyzing Morton's work from the phrenological viewpoint could open new ways of looking his theories from the viewpoint of his contemporary science and medicine.⁷⁸

2.5. Travel accounts and other literary sources

Morton's introductory essay in *Crania Americana* was not based on his own experiences or research 'on the field'. While Morton is most famous for his work on craniology and skull measurements, his sources in the introductory essay were mostly anthropological literature and travel descriptions. At the time travelers accounts were the only documents available about many distant regions and their inhabitants. While these accounts were sometimes filled with interesting anecdotes rather than carefully accumulated data, they were still an early form of cultural anthropology. Bronwen Douglas calls the period 1766–1840 "the classic area of scientific voyaging"⁷⁹ and thus the number of available descriptions from which Morton could construct his descriptions of each race was considerable.⁸⁰

⁷⁸ Morton 1842, 15–16.

⁷⁹ Douglas 2008b, 99.

⁸⁰ Guichard 2013, 20–23; Stanton 1960, 38–39.

Travelers were expected to know the earlier accounts concerning the area they were travelling to. Commenting and correcting earlier travel accounts was a way to establish credibility. Sometimes travel accounts formulated something that could be called ‘an ethnographic present’. In such cases the writer described an event, which was not necessarily a description of any one event but could be an amalgamation of the many experiences the writer had had with the nation he was describing. Certain places in Europe have been recognized in history of science as having been at the time the scientific centers, where information gathered, for example Uppsala, London and Leiden. In Morton’s source material this is visible in the fact that many his sources were written by English doctors, priests or government officials. Overall many were highly educated or military men, with education and qualities to survive in difficult and unpredictable circumstances. Morton also had contacts with the Swedish anthropologist and co-craniologist Anders Retzius, from whom he received skulls from Northern Europe.⁸¹

Morton often quoted directly the passages he wanted to use, with such references that in many cases it has been possible to find the source and compare it directly to Morton’s text. While he referenced his information for the most part carefully, he did not always provide full information about the source. For example, when he wrote about Mongol-Tartar family he named his source as “Tooke’s Russia”. The man in question must have been William Tooke (1744–1820), famous English translator, writer and Russophile, who both wrote and translated several books about Russian history and nations which resided inside the empire’s borders. However, which one of Tooke’s books Morton used as a source in *Crania Americana* is not made clear in the reference or the text. When Morton did not quote his sources directly it is often difficult to assess which opinions were Morton’s own and which belonged to his source.⁸²

Stanton points out that “drawing cultural and aesthetic judgements”, which Morton practiced in this part of *Crania Americana*, was typical for the anthropologists of the time. Morton’s cranial measurements represented the new, mathematical and repeatable methodology which was replacing aesthetic judgement. Aesthetic judgement worked especially securely in the framework of ethnocentric civilization hierarchy. According to this hierarchy the white Europeans were on

⁸¹ Kennedy 2013, 65–68; Huigen 2009, 13–17, 20–26; Mann 2009, 160; Isaksson 2001, 69, 210–211; Stanton 1960, 25.

⁸² Appleby 2008; Morton 1839, 38–41.

the top and everyone else was compared to them. Subjective standards like beauty were seen exclusively from European perspective and how well the others were able to realize them determined their place in the hierarchy.⁸³

Aesthetics played an especially prominent role in the theories of the German professor Christoph Meiners (1747–1810), who was Blumenbach’s colleague in the University of Göttingen. To him, the most important criterion of human difference was their relative beauty or ugliness, which was closely connected to skin color. In his theory, it was possible to divide the whole humanity into Caucasians, who were civilized, white skinned and beautiful and to Mongolians, who were semi-civilized at best, dark-skinned and ugly. In *Crania Americana* aesthetic judgement was often associated with descriptions of women, which were few and usually very brief. For example, the Circassian women of the Caucasian family were described as “exquisite beauty of form and gracefulness of manner, they surpass all other people”⁸⁴ while the ‘Hottentot’ women of Austro-African family were described “even more repulsive in appearance than the men.”⁸⁵⁸⁶

Even though skulls were Morton’s specialty, he describes them in the essay only occasionally and never with the systematic approach that has been associated with his cranial measurements. Morton mentioned his own measurements only a few times in the essay, and generally wrote about other people’s skull measurement results in only a few instances. For example, he pointed out that the Malay’s had smaller facial angle than Chinese or Mongols. This result was based on Morton’s own measurements, obtained from the thirteen skulls in his possession. Morton also very rarely referenced to his personal experiences. One of these occasions was to confirm the Scottish scholar and ethnologist John Crawford’s (1783–1868) description of the Malays with his own observations of the Malay sailors he had seen in America.⁸⁷

In some cases, Morton also referenced linguistic and historical sources. For example, Morton described the possible Phoenician origin of the Celtic family which was Sir William Betham’s (1779–1853) theory based on linguistic studies and comparison of Phoenician and Gaelic

⁸³ Smedley 2011, 172–173; Huigen 2009, 22–26; Stanton 1960, 33–34.

⁸⁴ Morton 1839, 12.

⁸⁵ Morton 1839, 90.

⁸⁶ Keevak 2011, 61–62; Huigen 2009, 22–26.

⁸⁷ Ballard 2008, 158; Brace 2005, 32–35; Isaksson 2001, 68; Morton 1839, 56, 60.

languages. Morton used history most often to explaining how current nations had been formed or ended up where they were geographically. Most of Morton's sources were contemporary descriptions of the history of a certain area. In few occasions Morton used ancient history or myths as if they were reliable accounts of past events. For example, Aeneas' flight from Troy and the rape of Sabine women were represented as legitimate explanations of Roman national history and their physical features.⁸⁸

⁸⁸ Morton 1839, 12–13, 16.

3. Morton's descriptions of human races in *Crania Americana*

Focus of this chapter is on the second part of my first research question: history of the ideas behind the race descriptions in *Crania Americana*. When in the previous chapter the focus was on the large, international ideas of races, in this chapter I will study in detail the actual descriptions the five races in the introductory essay of *Crania Americana*. Special attention is given to few pronounced themes that rise from the descriptions like skin color as a racial marker or perceived effects of religion. In some cases, Morton also took part in contemporary scientific debates, and I have taken special interest on them, because these debates illustrate Morton's knowledge of and involvement in contemporary scientific issues. Through careful examination of the ideas which Morton connected with each race, I make visible the rich cultural history behind Morton's race descriptions. I go through each race in the order used by Morton in *Crania Americana*. In addition to this, I discuss the Ancient Egyptians separately, because Morton's description of them provides very good examples of some of the political and hierarchical aspects of the race debate.

In addition to the actual descriptions, special attention is given to Morton's sources. By going through Morton's footnotes in *Crania Americana* it has been possible in many cases to find the actual texts which Morton used as his sources, and I have compared Morton's essay to the original sources when they have been available. In most cases Morton followed these sources very closely. Because of this I have extended my enquiries on the authors of these sources and gathered some information about their personal histories, nationalities, genders and occupations to contextualize them. Even though Morton provided very little first-hand information in the introductory essay, his role was still the most active one, because he chose and collected all this information and deemed it important enough to publish in the introduction of his book.

Each section of this chapter begins with Morton's own summary of the race in question. These summaries are from the introductory essay of *Crania Americana*, where they were presented as section of their own before the more detailed descriptions of races. They can be interpreted as representing the features which Morton wanted to highlight as essential for each race. I have placed Morton's summaries in the beginning of each section to highlight the difference with the actual, longer descriptions. They paint a considerably more complicated picture, but if one reads only these summaries, one can get a misleading impression that the races were distinct, separate

groups that did not have much in common with each other. Emphasizing the separateness of races may have been connected to Morton's general belief that the races had been separate from the beginning, an idea that was central in arguing for polygenesis theory. This aspect of Morton's work is the topic of the last chapter of my thesis.

3.1. The Caucasian race

The Caucasian Race is characterised by a naturally fair skin, susceptible of every tint; hair fine, long and curling and in various colors. The skull is large and oval, and its anterior portion full and elevated. The face is small in proportion to the head, of an oval form, with well-proportioned features. The nasal bones are arched, the chin full, and the teeth vertical. This race is distinguished for the facility with which it attains the highest intellectual endowments.⁸⁹

'Caucasian' as a name for the race which originated from Europe has been attributed to Blumenbach, who used it in *De Generis Humani Varietate Nativa*. This name is said to have been chosen because the Georgians who lived in the area had been described by some travelers to be the most beautiful people on Earth. Morton repeated this story in *Crania Americana*; the good looks of Caucasians and Georgians were attributed to the assumption that they still lived in the original birth place of the Caucasian race. It is possible that the choice was influenced by religious symbolism due to the proximity of Mount Ararat, where Noah's Ark was thought to have landed after the flood.⁹⁰

Morton divided the Caucasian race into seven distinct families: Caucasian, Germanic, Celtic, Arabian, Libyan, Nilotic and Indostanic. Each family was in turn divided in branches which included known nations and tribes, both historical and contemporary with Morton. Things were further complicated by the mixing of nations, families and even races, so that origins of many nations which existed at Morton's time were hard to trace. The Caucasian race takes up the whole first page of the table of Morton's races in the appendix, which reflects how extensive and

⁸⁹ Morton 1839, 5.

⁹⁰ Keevak 2011, 61–64; Brace 2005, 44–45; Morton 1839, 8.

complicated this race was in Morton's categorization. Morton's definition was not accepted by all; for example, Josiah Nott scolded him in *Types of Mankind* for putting so many dark-skinned races in the same category with white ones. There was also a contemporary theory that the ancient American civilizations had been early colonies from Europe, possibly the lost Hebrew tribes from the Bible. Morton discussed this theory in several of his publications, but he was always against it, stating that the ancient monuments of the Americas had been built by the ancestors of the local populations.⁹¹

The Caucasian family was divided in the Caucasian proper, Persian and Pelasgic branches. Caucasian branch included people close to Caucasus Mountains, of which the Circassians were first tribe to be described. They were said to be the fairest of all Caucasian people, both men and women. Georgians were also described as beautiful, though they had darker skin than Circassians. Here Morton pointed out that Blumenbach had named the Georgian female skull in his collection as the most perfect example of Caucasian cranium. Morton's references included for example, Julius Klaproth (1783–1835), German polyglot and explorer who made his name in Sinology but studied and wrote about many other areas and languages as well, and Frederika von Freygang (1790–1863), a diplomat's wife whose letters of her travels in Caucasus and Georgia had been translated to several languages. The moral character of Caucasian branch did not get as unwarranted admiration as their looks. Freygang for example, described tribes like Ossitinians, Inguches and Kists as hordes of greedy bandits. Morton emphasized that despite their shortcoming these tribes were still intelligent and brave, and with the right guidance could correct their ways. In some cases, according to Morton, the Muslim faith was the most important degrading factor.⁹²

The Persian branch included Persians, Ilyats, Afghans and Kurds. Modern Persians had been mixed with both the conquering Mongol-Tartars and the Caucasians proper. Mountain peoples were the least mixed and very fine looking. Morton's reference here was the Scottish artist and traveler James Baillie Fraser (1784–1856). In towns and cities upper classes had mixed a lot with Georgians and Circassians, which had further improved their looks, at least according to Sir John

⁹¹ Bieder 1986, 108–118; Berkhofer 1978, 34–38; Nott and Gliddon 1854, 451; Morton 1839, 5, 7, 244–246, 260; Morton 1844c, 33–34; Morton 1846, 7–15.

⁹² Kornicki 2000, 579–584; Morton 1839, 7–13; Freygang 1823, v–vii.

[Jean] Chardin (1643–1712). Active over hundred years before most of Morton's other sources, Chardin had been a French merchant and traveler who had immigrated to England and whose accounts of Persia and its culture were a basis for rising interest in oriental studies in Europe.⁹³

The Ilyats (I'liyáts) were described as nomadic people and Morton's source, novelist and a diplomatic envoy for the British government in the Near East James Morier (1780–1849), suspected they were actually Mongol-Tartars. Afghans on the other hand were definitely Caucasians, according to the descriptions of Sir Alexander Burnes (1805–1841), a famous explorer. In addition to this Morton seems to have accepted the theory that Afghans were Jews converted to Islam, which had been formed by a missionary Joseph Wolff (1795–1862), who had himself been born a Jew but converted to Anglicanism. The Kurds in turn were described by Claudius James Rich (1786–1821) a British diplomat, collector and amateur archaeologist. He pointed out the difference between what he named clansmen and peasants, former being military and harsh both in looks and habits, and latter softer and Greek-like in appearance.⁹⁴

Pelasgic branch included nations with classical history like the Greeks, the Romans and the Etruscans. The name was derived from the Pelasgi who were supposedly the original inhabitants of Thessaly and later spread all over Mediterranean and assumed the name Hellenes. Morton's source on Greeks was French head of scientific commission in Algeria, Jean-Baptiste Bory de Saint-Vincent (1778–1846), whose descriptions Morton used on many occasions in *Crania Americana*. Modern Greek men were described as notably handsome and athletically built, and at their best comparable to statues like Apollo of Belvedere. Despite this Morton wrote that the Greeks had deteriorated morally since the Antique, perhaps because they had mixed with and been subjected to other nations, especially the Turks who in Morton's racial division belonged to the Mongolian race. The moral deterioration was essential to Morton because as the English schoolmaster and writer John Bigland (1750–1832) had put it: moral rather than physical features were essential in the formation of national character.⁹⁵

The Romans belonged to the same Pelasgic branch as the Greeks. Morton based their close connection partly to the myth that Rome had been founded by exiled Trojans, who were Greeks.

⁹³ Eurich 2008; Falk 2004; Morton 1839, 9–10.

⁹⁴ Nissimi 2018; Oliphant 2009, 25; Prior 2008; Watt 2002, 58–59; Morton 1839, 10–11.

⁹⁵ Brace 2005, 41; Mew 2004; Morton 1839, 11–12.

The Etruscans had also been a Pelasgic nation, though they were only briefly mentioned by Morton. Despite their close familiarity the Roman physical form did not get as positive a description as the Greek. The Irish Cardinal and the first Roman Catholic Archbishop of Westminster Nicholas Wiseman (1802–1865) wrote that they typically had “a large and flat head, low and wide forehead, a face, in childhood, heavy and round – later, broad and square, a short thick neck, and a stout and broad figure.”⁹⁶ He had based this description on carved funerary monuments.

The Germanic family was divided to Teutonic and Slavonic branches. According to Morton’s general description, the Germanic family were middle sized, robust, light haired, brave, patriotic and intelligent in all areas. Morton took dividing the Germanic family to Teutonic and Slavonic branches and most of the descriptions from Bory, who had in fact gone much further in his racial divisions than Morton and divided humans into 15 separate species. Teutonic branch included most German-speaking and the Nordic nations. Teutonic language had been the root of English, Dutch and Scandinavian languages. They had originated possibly from the Alps and spread all over Europe under different names like Goths, Saxons, Danes, Normans and Norwegians. They had replaced and/or mixed with Celts in most parts of Europe. Morton noted that the Scottish historian and antiquarian John Pinkerton (1758–1826) had believed that Germanic and Pelasgic nations all had a common origin in Persia, but that Prichard agreed with Bory, as did Morton himself.⁹⁷

The Slavonic branch had, according to Bory, originated from Mount Krapack from where they had migrated to west and spread over most of Eastern Europe. This branch included the modern nations of Russian, Poles, Lithuanians and some Bohemians and Hungarians, though according to Julius Klaproth, Russians had been mixed with Tartars who conquered them in 12th century. Physical appearance of the Slavonic branch was generally darker than that of Teutons. Their moral qualities included were bravery, but they were mostly uncultivated except for the Russians.⁹⁸

⁹⁶ Schiefen 2011; Morton 1839, 12–13.

⁹⁷ O’Flaherty 2015, 45–58; Brace 2005, 41; Morton 1839, 13–15.

⁹⁸ Morton 1839, 15.

The Celtic family was considered to have been the original inhabitants of Western Europe, but at Morton's time they mostly restricted to Brittany, Scotland and Ireland. In general, the members of this family were described as tall and strong, harsh featured, slow but laborious, quick tempered, brave and honest. Celts were one of the most mixed families. Anglo-Saxons for example, were a mix of Teutons, Romans, Saxons and Normans. With their supreme intelligence, courage and entrepreneurship they had colonized large parts of the world. The mythology of Anglo-Saxon superiority had a long history. It had been built largely after England had broken ties with the Roman Catholic Church and needed to rebuild their glorious history apart from the ancient Romans. Americans adopted this ideology readily as part of their racial world view. In line with this Morton pointed out that the Anglo-Americans, descendants of Anglo-Saxons, were not in any way inferior to them. French in turn had more Celtic ancestry than Anglo-Saxons, which according to Bory explained their lively, vane and light-hearted national character.⁹⁹

Description of the Celtic family included two discussions about languages and whether they could be used as evidence of relationships between human groups. The first was a debate about Sir William Betham's (1779–1853) theory that Phoenicians were ancestors of Celts based on similarities between languages. Morton's attitude was reserved, and he noted that if Celts of Ireland, Scotland and the Isle of Man had Phoenician ancestors, their culture should have somehow reflected it. He also pointed out that Caesar had described the Irish as very crude people. I was not able to find any modern commentaries about this theory; Sir William Betham has been better known about his career as a herald and antiquarian in Ireland, where he held the title of Ulster king of arms from 1820.¹⁰⁰

The other linguistic debate Morton took from James Cowles Prichard. Prichard's opinion was that languages of Caucasian, Germanic, Celtic and Hindu families had similar grammatical structure and primitive words, which could be explained if these languages had a common origin. This connection between Indo-European languages had originally been established by linguist and scholar Sir William Jones (1746–1794) in 1784, but Morton did not mention him in this context. Prichard thought that language was a strong indicator of familial relationship between nations. He also thought that ethnology should be based mainly on languages. Morton's answer

⁹⁹ Smedley 2011, 173–177; Morton 1839, 15–17.

¹⁰⁰ Gilbert 2008; Morton 1893, 16.

to Prichard was that ‘Humboldt’ had argued against using linguistic connections as sole proof of relationship between nations.¹⁰¹ Morton also pointed out that Prichard and Betham had come to different conclusions about where to put the Celts based on their language: Prichard thought they were Indo-European, Betham thought they were a Phoenician branch of Arabs.¹⁰²

Arabian family included the Arabs, many nations of Northern Africa and the Jews. The Arabs were described as having quite fine facial features and they were compared to Circassians. Their moral characteristics were described as containing extreme opposites: they were said to be impulsive, warlike, slothful and vain, yet also hospitable, imaginative and extremely polite. The wandering habits of most Arab tribes, which had continued at least from the biblical times, were also noted, though Morton did not give any references to this information. Next Morton described several other nations which belonged to his Arabian family. Moors of Morocco were described by English James Grey Jackson who had spent 16 years in the country studying local language and culture before publishing his book *An Account of the Empire of Morocco and the Districts of Suse and Tafilalt* in 1809. Because of his exceptionally long exposure to the local culture, Jackson’s book has been praised for being an exceptionally good description of the local culture for his time. Other North African nations, like Saracens, Bedouins and Wahabys were described by Swiss explorer Johann Ludwig (John Lewis) Burckhardt (1784–1817).¹⁰³

Jews, Morton wrote, were originally a pastoral nation that had settled in Palestine. Their physical features were described by Morton as “familiar in the receding forehead, the elongated face, and the large and aquiline nose.”¹⁰⁴ Morton wrote that there were some so called “black Jews” in Malabar, but the missionary Joseph Wolff had testified that they were just converted locals. Morally Morton complimented Jews for their literacy, religious zealous and patience when enduring hardships. Morton used Prichard’s Bible based explanation that both Arabs and Jews were descendants of the Chaldeans of Babylon, who in turn were one of the Semitic nations descended from Noah’s son Shem. The description of Arabian family ended with description of

¹⁰¹ Morton did not give references to this claim, so it is not clear whether Morton meant the Prussian explorer and anthropologist Alexander von Humboldt or his brother, the linguistic philosopher Wilhelm von Humboldt (1767–1835). Fabian writes that Alexander von Humboldt was the most powerful figure in Morton’s intellectual world, so I assume that ‘Humboldt’ refers to him. (Fabian 2010, 90; Morton 1839, 18.)

¹⁰² Livi-Bacci 2015, 537–540; Brace 2005, 65, 70; Isaksson 2001, 92–97; Majeed 1992, 12–16; Morton 1839, 17–18.

¹⁰³ Guichard 2013, vii; Lane-Poole 2004; Chtatou 1996a, 59–63; Morton 1839, 18–21.

¹⁰⁴ Morton 1839, 21.

Phenicia, or Phoenicians, who were also assumed to have been a Chaldean nation. There was very little information of them, but Morton referenced French diplomat and consul in Morocco, Louis de Chénier (1722–1795), according to whom they had mixed with local Mauri-population when they had founded Carthage.¹⁰⁵

The Libyan family included the tribes that lived in North Africa around the Atlas Mountains and were not Arabs. Arabs called them Berbers which Morton also used, but he noted that they called themselves Amazirgh. According to Prichard and Göttingen historian Arnold Heeren (1760–1842), they were descendants of ancient Libyans. Morton pointed out that they had handsome Caucasian features, though their skin color ranged from white to almost black. The most famous tribe was the Tuariks. Morton paraphrased the British explorer and Captain George Francis Lyon (1795–1832) who had written that they were “the finest men he ever saw; tall straight and handsome, with imposing air of pride and independence. Their features resemble those of the southern Europeans; their natural complexion is nearly white, much darkened, however, by exposure to a hot sun”¹⁰⁶. Morally “They are said to be less treacherous than the Arabs, yet passionate, cruel and revengeful.”¹⁰⁷ Morton used Prichard as an additional source but also wrote that he had found the best account of ‘the Berbers’ in an article in *Penny Cyclopaedia*, an encyclopedia published by The Society for the Diffusion of Useful Knowledge.¹⁰⁸

Other tribes of the Libyan family that Morton described were Shilloohs, Adem, Beni-Mozab and Kabyles. The last tribe was notable because they had light skin and hair, as had been described in Prichard’s book. Guanches of the Canary Islands also belonged also to the Libyan family, even though they practiced embalming and because of it had sometimes thought to have been related to the Egyptians. Morton pointed out that sometimes ‘Berbers’ were confused with Arabs because their habits were so similar, but that their languages were completely different. Here is an example of Morton using language as proof for the relation between two nations even though he had criticized the same practice earlier when criticizing Prichard’s theory of Indo-European nations. Also, some tribes of East Africa resembled ‘Berbers’ physically, and had, according to Morton, possibly mixed with the Ethiopian race. Morton described the good features and

¹⁰⁵ Chtatou 1996b, 266–267; Morton 1839, 21–22.

¹⁰⁶ Morton 1839, 22–23.

¹⁰⁷ Morton 1839, 23.

¹⁰⁸ Johansen 2017, 703; Devetak 2015, 73–77; Baigent 2013; Morton 1839, 22–23.

beautiful forms of these people, which in his opinion seem to have resulted from their Caucasian ancestry.¹⁰⁹

The Nilotic family included Modern and Ancient Egyptians, Nubians and Abyssinians. Ancient Egyptians are described in more detail in their own segment. Morton's modern Egyptians consisted of two classes: Copts and Fellahs. In Morton's narrative Copts were possibly descendants of Ancient Egyptians, as the German mathematician, astronomer and a member of the Danish Royal expedition to Arabia in 1761, Carsten Niebuhr (1733–1815), Baron Vivant Denon (1747–1825) and others had believed based on physical resemblance, though they had been mixed with many foreign conquerors who had oppressed the Nile valley during the known history. This had also affected Copt's physical and moral features making them graceless, greedy and faithless people. Morton's references to this information were the Irish Richard Robert Madden (1789–1886), son of silk manufacturer who travelled in Levant in his youth, and the British scholar Edward William Lane (1801–1876). Fellahs in turn, formed the great masses of Egypt. They were Muslim-Egyptians, mix between Copts and Arabs. They were much more handsome than the Copts, at least according to Lane.¹¹⁰

Nubians were the second division of the Nilotic family, and they were described in very positive terms. For example, in the words of the American explorer and bestselling travel author John Lloyd Stephens (1805–1852) who later became even more famous for his travels in Central America, they were “tall, thin, sinewy, and graceful, [...] His face is rather dark, though far removed from African blackness; and his features are long and aquiline, decidedly resembling the Roman.”¹¹¹ Madden wrote that Nubians were the real descendants of the Ancient Egyptians. It was emphasized several times that despite their occasionally dark skin, the Nubians, ancient or modern, did not resemble the black race in any way. Abyssinians were a mixed, morally degraded nation which lived south from Nubians. They had supposedly a Caucasian origin which was visible from their physical appearance which resembled Arabians and Nubians. Swiss

¹⁰⁹ Morton 1839, 17–18, 23–24; Prichard 1836/II, 29.

¹¹⁰ Guichard 2013, 3–5, 36, 139–148, 318; Bernasconi 2007, 8; Rigg 2004; Thompson 1996, 565; Morton 1839, 24–26.

¹¹¹ Morton 1839, 26; Stephens 1837, 113.

missionary Samuel Gobat's (1799–1879) opinion of Abyssinians was that they were liars but able to feel shame, unlike the Arabs.¹¹²

Indostanic family included the Hindus who varied in their physical appearance more than any other nation in the world. Their skin color for example, ranged from black to very fair. The general features that Morton could describe were that Hindus were often short and known for their intelligence. Morton described several nations which according to him differed especially from the large masses, like Tudas of Nilgiri hills described by Captain Henry Harkness, Rajpoots or Sikhs, described by Sir John Malcolm (1769–1833). Many of Morton's references came from the Bishop of Calcutta Reginald Heber (1783–1826) whose posthumous description of his travels in India was so popular that five editions were published in the fifteen years after the first edition in 1828.¹¹³

Moral descriptions provided by the Bishop Heber were rather extreme. On one hand, Hindus were generally mild mannered and industrious, and their “national temper is decidedly good, gentle and kind.”¹¹⁴ At the same time they were extremely greedy, to the extent that they allegedly murdered children for their jewelry. It was also pointed out that when they did not have the obligation to act civil, they became “oppressive, cruel, treacherous, and everything that is bad.”¹¹⁵ Religion was the main cause for all these bad qualities, though it was hinted that the good qualities of the Hindus were caused by external influence and obligation rather than a strong innate morality.¹¹⁶

Other themes that Morton brought up in the section about Indostanic family included the description of the caste system, which Morton had adapted from the Scottish geographer Hugh Murray's (1779–1846) magnum opus *Encyclopaedia of Geography* (1834) and French Jesuit Abbé J.A. Dubois' work *Character, Manners and Customs of the People of India and of their Institutions Religious and Civil* (1816) which had been purchased and translated originally by the East India Company to serve as a handbook for English officers. The origins of Hindus were also

¹¹² Achim 2014, 23–24; Guichard 2013, 3; Perry 2007; Morton 1839, 26–27.

¹¹³ Frykenberg 2009; Laird 2004; Cederlöf 2002, 333–334; Morton 1839, 32–37.

¹¹⁴ Morton 1839, 33.

¹¹⁵ Morton 1839, 33.

¹¹⁶ Morton 1839, 32–33.

discussed; Bory de Saint-Vincent and Malte-Brun had assumed that they had all originated from sources of Indus, while Heeren had thought that the higher castes were northern conquerors and the lower castes with darker skin were the original inhabitants of India.¹¹⁷

3.2. Ancient Egyptians

Morton counted Ancient Egyptians into the Nilotic family of the Caucasian race. The opinion that the Ancient Egyptians belonged to the Caucasian race was a controversial one already in his own time, and the discussion about the ethnicity of Ancient Egyptians would continue in both the scientific and popular realm long after him.¹¹⁸ The discussion of the racial status of the Ancient Egyptians resurfaced in the 20th century. For example, Martin Bernal's *Black Athena* (1987, 1991) brought up the discussion about ancient historiography and how modern notions of race, invented in Morton's time, had affected interpretation of ancient history. For example, according to Bernal, Egyptian and Semitic roots of Greek culture had been forgotten in modern historiography in favor of Indo-European influences. The discussion that followed the publication of *Black Athena* was quite heated, not least because the racism in science was a sensitive subject.¹¹⁹

Physically Morton described the Ancient Egyptians as "spare in person, with long limbs and delicate hands and feet."¹²⁰ Their head was described as similar to the Hindu's: Caucasian in shape but generally smaller. There were two distinguishable head shapes, one which had a low and narrow forehead and the other that was described as a fully developed Caucasian head. The first type was prominent in the sculptures and Morton assumed it could have been characteristic

¹¹⁷ Mohan 2004, 231; Norgate 2004; Morton 1839, 32–37.

¹¹⁸ Morton defined his position somewhat in *Crania Ægyptiaca*, writing that originally Egyptians had been a Caucasian race physically between Indo-Europeans and Semitic people. They had, however, mixed much with other Caucasian nations like Indo-Arabians, Hellenes, Scythians and Phoenicians. (Morton 1844b, 63–66.)

Stanton had interpreted this part of Morton's text to mean that Ancient Egyptians were a mix of several races, at least Caucasian and the black race. Smedley has quoted this view in her book. However, Morton did not even mention the black people in this context. He wrote about mixing of races but in this context the word race was used in the same meaning as nation and not in the modern sense. This should be apparent from how Morton wrote about "Caucasian races" in the same context. (Smedley 2011, 232; Stanton 1960, 51; Morton 1844b, 63.)

¹¹⁹ Smedley 2011, 248, footnote 4; Bernasconi 2007, 6–20; Fagan 2004.

¹²⁰ Morton 1839, 27.

of the nation as a whole. The facial features were described as generally pleasing, the skin tone was said to have varied, much like in the modern Hindus. Hair was described as long, straight and black.¹²¹

Morton's main sources were R.R. Madden, Julien-Joseph Virey (1775–1846) and John Gardner Wilkinson (1797–1875). At this point Morton had not yet received the over hundred Egyptian mummies he would later obtain from his friend George Gliddon, so he did not have any personal experience in the subject. Out of Morton's sources, Julien-Joseph Virey was a noteworthy scientist in his own right and had combined Linnaeus's taxonomy with Buffon's historical geography into a general theory of human's rise into civilization. He was also Buffon's disciple and a polygenist, who had a theory that the black race could be considered a distinct species. Wilkinson in turn was a pioneer Egyptologist who made the daily life of the Ancient Egypt accessible to popular imagination. His most famed work, *Manners and Customs of the Ancient Egyptians* (1837–1841), which Morton used as a source, had not even been completely published yet. Madden was at the time still a young Irishman who would later gain fame with several abolitionist works.¹²²

Morton explicitly wrote that in his opinion, the ancient Egyptians did not have any affinity with the black race. This is noteworthy because Morton was not usually explicit with his opinions, especially in controversial matters. The polygenesis question is a good example of this. In *Crania Americana* Morton also argued against some popular arguments for the Ancient Egyptians black origin. One of these was Constantin François de Chassebœuf, comte de Volney's (1757–1820) observation that the Sphinx "was typically Negro in all its features"¹²³, which had made him hypothesize that the original Egyptians had been black and with centuries of intermixing with Europeans had produced the modern Copts. Volney's texts were used widely by abolitionists as proof of black equality.¹²⁴

Morton's counterargument was that the Sphinx had indeed the features of the black race but it did not mean that the people of Ancient Egypt had had them. His argument was that the Sphinx's

¹²¹ Morton 1839, 27–29.

¹²² Douglas 2008a, 50; Rigg 2004; Thompson 2004.

¹²³ Diop 1974, 27.

¹²⁴ Bernasconi 2007, 6–8; Diop 1974, 27; Morton 1839, 29–31.

features had been borrowed from their southern neighbors, like many other of their mythological rites. Morton compares the situation with how Greeks and Romans had borrowed religious elements and religions from Egypt, and they still had not been considered Egyptians. His other example of the phenomenon were the Buddhists who also, he wrote, “represent their principal god with Negro features and hair, and often sculpted in black marble”¹²⁵. Another possible explanation which Morton considered was that the Sphinx in fact was a shrine built by the large black population that had existed in Egypt as a servile class, as he assumed.

Another point, made in favor of the Ancient Egyptians being part of the black race, was that Herodotus had described them having black skin and short, curling hair. Morton’s answer was that this description did not necessarily need to describe the black race and could as well mean Nubians, who according to his own classification were Caucasians. He also added that *black* did not necessarily mean the same thing it meant in the modern discussion and that Greek had applied the term to all nations which had darker skin than themselves. Morton was convinced that Herodotus did not see Egyptians as black people even though, Morton admitted, he on occasion used the collective term ‘Egyptians’ for the armies that included both black and Egyptian troops. His proof was that when listing the rulers of Ancient Egypt, Herodotus had mentioned that eighteen of them had been foreign, Ethiopians. Additional proof was that the only female ruler on the list was described a native with “fair skin and flaxen hair”¹²⁶. This description, Morton concluded, could not be farther from a black person and so proved that at least the highest classes of Ancient Egypt had been Caucasian.¹²⁷

Morton added that Ancient Egyptians and Hindus had been connected in some theories. He wrote that Blumenbach’s opinion of Ancient Egyptians had been that they were to be placed gradually between Ethiopians and Hindus. Morton discarded the connection with Ethiopians completely but was more positive about the connection with the Hindus one. He wrote that Ancient Egyptians and Hindus had numerous parallels in history, arts, religion, diet and even in the caste system, which according to Diodorus (c. 90–30 BCE) had, at least in some form, existed in Ancient Egypt. Therefore, there had been at least extensive interaction between the two nations. Both

¹²⁵ Morton 1839, 29.

¹²⁶ Morton 1839, 30.

¹²⁷ Morton 1839, 29–30.

nations belonged to Morton's Caucasian race, so he believed they were related but it seems he was not certain how close the connection was.¹²⁸

3.3. The Mongolian race

This great division of the human species is characterised by sallow or olive colored skin, which appears to be drawn tight over the bones of the face; long, black, straight hair, and thin beard. The nose is broad, and short; the eyes are small, black, and obliquely placed, and the eyebrows arched and linear: the lips are turned, the cheek bones broad and flat, and the zygomatic arches salient. The skull is oblong-oval, somewhat flattened on the sides, with a low forehead. In their intellectual character the Mongolians are ingenious, imitative, and highly susceptible of cultivation.¹²⁹

'Mongolian' as a racial category was invented by Blumenbach in 1795. He thought that the source of the race was in East Asia. He also applied the term 'yellow' first time in describing the skin color of these people, though this was possibly also already a contemporary European stereotype. In earlier times, starting with Marco Polo in late Middle Ages, East Asian people had been described as 'white'. In the abstract above Morton seems to have accepted Blumenbach's description. In describing skin color, he uses words 'olive' and 'sallow', latter meaning sickly yellow or brownish skin color. The descriptions of this race varied occasionally much more but, as a racial category, 'Mongolian' was not questioned in a long time.¹³⁰

Morton's Mongolian race was formed by five families: Mongol-Tartar¹³¹, Turkish, Chinese, Indo-Chinese and Polar. Mongol-Tartar family was divided into three branches: Finnish, Mongol proper and Tartar. Unlike with Indo-Europeans, language had been used as criteria in this division. Other families did not have distinct branches but included a group of nations, or a single

¹²⁸ Brace et al. 1993, 22–23; Morton 1839, 37–38; Blumenbach 1794, 191.

¹²⁹ Morton 1839, 5.

¹³⁰ Keevak 2011, 23–30, 64–70.

¹³¹ *Tartar* was the form which was most commonly used in English from 14th century onwards. Ethnologically *Tatar* is now the preferred term. (Keevak 2011, 61.)

nation like the Turkish family, which were geographically and/or culturally similar. The Chinese family included Chinese, Korean and Japanese nations, Indo-Chinese family included the nations inhabiting Mainland South-East Asia between China and India, and the Polar family included the nations living in the northernmost parts of Europe, Asia and America. The relations between families and nations inside this race are not completely clear from Morton's description, but I have tried to make understanding them easier with the table in the appendix.¹³²

The descriptions of the Mongol-Tartar family, branches and nations were largely from two sources: William Tooke's 'Russia' and "Abul Ghaze, History of Tartars"¹³³. The first branch that Morton described was the Finnish branch. Finnish were largely counted among Mongolian nations until 1950's. This classification had begun with Blumenbach in 1795¹³⁴ and from there had spread through a series of references. As Morton had modelled much of his work after Blumenbach, it is probable that he also followed Blumenbach's classification here. However, Morton changed his classification of the Finnish people late in his career. In the posthumously published Manuscript B he wrote, without further explaining this change, that the Finnish race, especially the Western Finns, were to be considered "the aboriginal inhabitants of Scandinavia, the predecessors of the Teutonic nations"¹³⁵, thus clearly Caucasian. From early 19th century rise of nationalism in Finland, Finnish people had conflicted or negative reactions of being typed as 'Mongols' and aspired to be 'proper Europeans'. Reflecting this, the differences between Finnish and Sami people of Lapland began to be seen racial rather than cultural.¹³⁶

The branch of Mongol proper included nations like Calmucks, Burats and Kalkas, living in lands between Turkey and Chinese-Mongolian border. The Tartar branch had spread from the Great Tartary, between Siberia and India, to the eastern borders of Europe. It included, for example,

¹³² Morton 1839, 38–56.

¹³³ Morton 1839, 38;

From *A Catalogue Of The Books Belonging To The Library Company Of Philadelphia: II*, 1835, 842 "The ancient history of the Moguls and Tartars. By Abu'l Ghaze Bahādar. Translated from the Tartar manuscript; with a description of the countries they inhabit, compiled by the translator. 2 vols. London, 1730."

¹³⁴ In the first two editions of *De generis humani varietate nativa* (1775, 1781) Blumenbach had put Finnish and Sami people into Caucasian race but changed them to the Mongolian race in the third edition. Thus, they became the only European nations which did not belong to Caucasian race. Isaksson points out that reason could have been aesthetic: the Finnish skulls belonging to Blumenbach's collection did not meet the high standards which he had set to the Caucasian crania. (Isaksson 2001, 50.)

¹³⁵ Morton 1854, 311.

¹³⁶ Isaksson 2001, 50–51, 207; Lander 1991, 247–250.

Uzbeks and many smaller nations and tribes living in Siberia, Krimea, Kuban and Circassia. Morton noted that in many places Mongols and Tartars had mixed so much that it was impossible to classify tribes like Yakuts into either. Both Mongol and Tartar societies formed hordes, and their differences were mostly in language and occasionally in physical features. Morton also noted that historically, for example Genghis Khan had united both Mongol and Tartar hordes before leading them to west.¹³⁷

Blumenbach had arranged the racial relationships between Mongols and Tartars differently. He defined the Mongolian race and its typical features: yellow skin and square, flat facial features, because he wanted to distinguish them from Tartars, who in his classification were a part of the Caucasian race. Nicholas Wiseman, Morton's source on the scientific discussion of the topic, noted that different authors had different opinions on the relationship between Mongols and Tartars. For example, Blumenbach, Prichard and Pallas all thought they were different races, though they had similar cultures and had intermixed a lot in course of history.¹³⁸

Morton's Turkish family included only the Turks. According to Morton, they had also arrived in Europe from North of China with Genghis Khan. Morton's source for this historically common origin of Mongols, Tartars and Turks was Wiseman's *Twelve Lectures on the Connexion between Science and Revealed Religion* (originally published in 1836, American edition in 1837). Wiseman was a scholar, and much like Morton he based his writings on other people's texts, not on his own observations. Wiseman believed that Turks were physiologically Caucasian, opinion which Morton did not share. After arriving in Europe, Morton continued, the Turks had mixed with Circassians, Georgians and other nations, which Morton deemed the fairest of Caucasians, and "totally changed their physical character, and rendered them a handsome people."¹³⁹ Wiseman had acknowledged this theory but had not supported it because he did not believe that such mixing of blood would have infiltrated the whole nation. He believed however, in climate and surroundings rapidly affecting skin color.¹⁴⁰

¹³⁷ Morton 1839, 39–43.

¹³⁸ Keevak 2011, 65, 68; Wiseman 1837, 111.

¹³⁹ Morton 1839, 43.

¹⁴⁰ Schiefen 2011; Wiseman 1837, 110–111, 132; Morton 1839, 43–44.

Morton's Chinese family included Chinese, Japanese and Korean nations. According to Blumenbach, Chinese and Japanese were sub varieties of the Mongolian type. Morton concentrated heavily on China and Chinese. Morton's sources included texts by Sir John Francis Davis, first baronet (1795–1890) and Robert Morrison (1782–1834), both famous scholars of China at the time. Morrison for example wrote the first English-Chinese dictionary, first part of which was published in 1815. Another source was William Ellis (1794–1872), a missionary and expert of Polynesia.¹⁴¹

Morton complimented Chinese intellect and especially their ancient culture, even though he thought that it had remained stationary for the past 3000 years. He was very complimentary about many aspects of Chinese culture, including the organization of government, literature and printing, which he acknowledged had been invented in China long before Europe. He noted that nation of Europe had borrowed a lot from China, especially comforts like silk clothes and sleeping on mattresses. These luxuries were ancient in China but, Morton wrote, they had a downside: Chinese system was opposed to innovation and change. He stated that to prevent change Chinese legal system regulated everything from clothing to farming practices and writing system.¹⁴² Morton repeated these sentiments also in *Brief Remarks*: “In the Mongolian family the civilization was early, its progress was slow, and its degree is fixed. What it has been for ages, it is now.”¹⁴³

These theories were based on Ellis and a general text book called *Outlines of Universal History*, its American edition having been published in 1832 and edited by John Frost. Morton's descriptions of Chinese society and its negative attitude towards change are almost directly from *Outlines of Universal History*, and even the examples are the same.¹⁴⁴ The anecdotes about silk coming to Europe were from “Mr. Barrow”, without a more precise citation. Presumably the man in question was the famous Sir John Barrow, 1st Baronet (1764–1848), who wrote several accounts of his travels in East Asia and southern Africa in early 1800's, setting a new standard for travel literature. His book *Travels in China* (1804) is said to have been even the most

¹⁴¹ Keevak 2011, 65; Reynolds 2007; Douglas 2007; Etherington 2004; Morton 1839, 44–47.

¹⁴² Morton 1839, 45–46.

¹⁴³ Morton 1842, 22.

¹⁴⁴ Frost 1832, 16–17.

influential to the European idea of China in the 19th century. Barrow also depicted China as a stagnant society.¹⁴⁵

Depicting Chinese society and culture as stationary has been a powerful stereotype in the western world. Preconceptions related to this depiction still affected students in 1990s, for example, Pennycook describes that teachers used Kaplan's diagrams of cultural thought patterns when they were evaluating their student's papers. English students' essays were seen as linear and students with oriental background were described as having circular thought patterns. Since Marco Polo, China had been described in European literature generally with admiration, although this was not unreserved. This generally positive picture changed with the British imperialism and the industrial revolution from the mid-19th century onwards towards the idea that Western cultures had nothing to learn from China. Depictions of 'passive Oriental' and 'Oriental despotism' were part of this new way of seeing China from European perspective.¹⁴⁶ Morton's text includes elements of both viewpoints: clear admiration of Chinese culture and history, but also the idea that it was stationary and unable, or at least unwilling, to develop.

Morton's Indo-Chinese family included people of Burma, Siam, Cochin-China, Cambodia, Laos and Tonquin.¹⁴⁷ Historically known as Indo-China or Indochina in European context, the area is now called Mainland South-East Asia. The name Indo-China was first used by the geographer Conrad Malte-Brun in 1804. Philologist John Leyden suggested in 1808 the same name, arguing that these areas were located between China and India and had borrowed many principal features of their cultures from either one. Later, in colonial context, Indochina was used exclusively to refer to French Indochina that included Laos, Cambodia and Vietnam. Morton followed the geographical explanation for the name though he stressed that the Indo-Chinese family was not related the Hindus, who in Morton's categorization were a Caucasian family, but rather to the Mongolian race. Despite this, he admitted that some mixing had probably happened in the course of history.¹⁴⁸

¹⁴⁵ Huigen 2009, 149–150; Cameron 2008.

¹⁴⁶ Pennycook 1998. 160–161, 167–169.

¹⁴⁷ Burma now known as Myanmar, Siam is modern Thailand, and Cochin-China and Tonquin (Tonkin) form modern Vietnam. (Cotterell 2014, 186, 270.)

¹⁴⁸ Hahn 2013, 85, 89; Keyes 1995, 1; Morton 1839, 47–50.

Morton's descriptions of physical and moral qualities of the Indo-Chinese nations were generally negative. For example, Burmese people were described as physically resembling Chinese but "much uglier"¹⁴⁹ and moral character of Siamese people was said to be "suspicious, vacillating and cruel"¹⁵⁰. The latter assessment was borrowed from Dr William Ruschenberger (1807–1895), a surgeon of the American Navy and a member of Academy of Natural Sciences of Philadelphia, who's *Voyage Round the World* had been published in 1838 and dedicated to Morton.¹⁵¹ Ruschenberger drew special attention to the Siamese head shape, which he thought was very small and peculiarly shaped: for example, the lower part of the skull was asymmetrical. Perhaps it was Ruschenberger's personal connection to Morton had made him interested in cranial shape.

Polar family was the last one that Morton counted into the Mongolian race. Nations which were included in this family were Laplanders, Ostiaks, Samoyeds, Tungusians, Yakaguirs, Kamschatkans, Koriaks, Tchukches, Kurilians and Keralit, who were also known both as Eskimaux and Greenlanders.¹⁵² Now these nations are often called arctic or circumpolar peoples, and are often considered to be the native inhabitants of the areas they inhabit. Earlier anthropologists had often grouped these nations together: for example, Buffon had grouped all then known arctic nations together as a race and seen them as an example of the degenerating qualities of environment. In Buffon's hierarchy of nations, they were very low, above only some black nations. Cuvier had proposed two theories: arctic nations belonged either to Mongolian race or they had degenerated from the Scythian branch of the Caucasian race. In the end he set them to be a separate race.¹⁵³ Morton's general description of the Polar family was not very positive either: he wrote that "The concurrent testimony shows these people to be, both in appearance and manner, among the most repulsive of the human species"¹⁵⁴.

¹⁴⁹ Morton 1839, 48.

¹⁵⁰ Morton 1839, 49.

¹⁵¹ Ruschenberger 1838.

¹⁵² Morton 1839, 50–56.

¹⁵³ Isaksson 2001, 46–51.

¹⁵⁴ Morton 1839, 50–51.

3.4. The Malay race

[...] a dark complexion, varying from a tawny hue to a very dark brown. Their hair is black, coarse and lank, and their eye-lids drawn obliquely upwards at the outer angles. The mouth and lips are large, and nose is short and broad, and apparently broken at its root. The face is flat and expanded, the upper jaw projecting, and the teeth salient. The skull is high and squared or rounded, and the forehead low and broad. This race is active and ingenious, and possesses all the habits of a migratory, predaceous and maritime people.¹⁵⁵

‘Malay’ as a race had been invented by Blumenbach. He had separated it from the Mongolian race in the second edition of *De generis humani varietate nativa* in 1781. He chose the name based on linguistics, as a large number of the nations included to the race spoke Malayan languages. Bronwen Douglas points out that during late 18th and early 19th centuries Oceania rose as an area to the interest of European science, and scientific voyages to the area were very popular. Thus, travel literature, Blumenbach’s main source, was ample in supply and he also had personal connections with some of the foremost researchers. Blumenbach saw Malays as a transitional variety in between the extremities formed by Caucasians and Ethiopians.¹⁵⁶

Because Morton followed Blumenbach’s categorization, he also included Malay as a separate racial category. Morton noted himself that not everybody agreed with this categorization, as, for example, René-Primevère Lesson, the appointed surgeon and naturalist of French Coquille expedition of 1822–1825, had believed Malays to be a mixed race of Indo-Caucasians and Mongolians. Lesson was not alone, as French naturalists produced majority of early anthropology from Oceania, though they are largely missing from Morton’s short account of the topic. Despite categorizing them as a race, Morton did not have plenty to say about the Malays. This was the shortest chapter in the essay, consisting of only seven pages, while in comparison the Polar family alone had gotten six pages.¹⁵⁷

¹⁵⁵ Morton 1839, 6.

¹⁵⁶ Gascoigne 2015, 114; Douglas 2008b, 99–100, 106–107; Brace 2005, 44; Isaksson 2001, 50.

¹⁵⁷ Gascoigne 2015, 114; Douglas 2008b, 100, 107; Brace 2005, 44; Isaksson 2001, 50; Morton 1839, 56–62.

Morton's Malay race included two families: Malay and Polynesian. The reason for uniting them into one race seemed to be that they lived on islands which were scattered on large area from proximity of India to New Zealand. Malays lived closer to Asia, Polynesians closer to Australia. Morton emphasized the maritime tendencies of these peoples in several places in *Crania Americana*. Physically the race was very variable, and early anthropologists had a great deal of discussion on whether these peoples should be categorized into races, families or varieties. Morton did not comment on this discussion in *Crania Americana* more than previously mentioned. For Blumenbach the large physical range of Malays was proof that all humans belonged ultimately to the same species which had considerable ability to change under the influence of different environmental and other factors.¹⁵⁸

In *Crania Americana*, Malay family included inhabitants of Sumatra, Singapore, Java, Borneo, Amboyna, Formosa, Celebes, Philippines, Moluccas and parts of Ceylon¹⁵⁹ and Madagascar. Morton was careful to point out that in some of these areas, like inland Philippines and mountains of Molucca Island, the inhabitants did not belong to the Malay race but in Morton's own words "possess all the characters of Negroes".¹⁶⁰ Douglas writes that two historical phenomena were present at the same time in this separation: older deeply racist, anti-black ideology and newer 18th century taxonomic need to put everything in its place in some larger system. Oceania's first racial separation had been produced by the German father-and-son duo Johann Reinhold Forster (1729–1798) and Georg Forster (1754–1794) in 1778. They had two varieties of racial separation, one for people with darker skin and one with lighter.¹⁶¹

The same ideology was visible in the works of John Crawfurd, a Scottish ethnologist and Colonial administrator, who became one of the main European authorities on Oceania and its inhabitants. Crawfurd became a politician after settling back to England and was an adamant supporter of polygenesis and an adversary of Darwin's evolution theory after 1860. One of the sources Morton used for the description of the Malay family was Crawfurd's three volume book *the History of Indian Archipelago* (1820). Crawfurd's assessment was that the area was inhabited

¹⁵⁸ Douglas 2008b, 106–107; Morton 1839, 56–57, 62.

¹⁵⁹ Modern Sri Lanka.

¹⁶⁰ Morton 1839, 57–58.

¹⁶¹ Douglas 2008b, 99–103.

by two distinct races: black skinned ‘Oceanic negro’, not be confused with Africans, and brown skinned Indian islanders.¹⁶²

Crawfurd and his contemporaries were a part of the change in science of ethnology. With them ethnology grew from travel accounts written by sporadic travelers to purposeful studies and prolonged periods of field observation, and as a result, it became to be regarded as a more respectable science. Despite this not all of Crawfurd’s research was first class or his sources reliable and well measured; famous example was his description of Papuans as ‘dwarf African Negroes’ even though the only few Papuans he had met had been slaves on Java, and the one he used as an example was a ten-year-old boy. Morton’s other sources on the Malay were a philologist William Marsden (1754–1836) whose work had confirmed the linguistic connections over large areas of Austronesia and Sir Thomas Stamford Raffles (1781–1826), Crawfurd’s old superior from the British administration on Java, whose account of his encounter with Sumatran cannibals was directly quoted in Morton’s essay. Large parts of the descriptions of the Malay family were fragmentary however and had no citations at all.¹⁶³

The Polynesian family got its name in Morton’s classification from the geographical area where the nations belonging to it resided. It included islands on the Pacific Ocean; among others the Sandwich Islands, Easter Island, Tahiti and also New Zealand and Fiji, but Australian Aborigines were counted as their own family which belonged to the black race. Essentially this reflected the same problematics that were discussed with the Malay family: need to categorize natural phenomena and set certain peoples apart based often on prejudice.¹⁶⁴

Description of Polynesian family’s physical features differed from the description of Malay family’s, which was close to the general racial description of the Malay race, cited in the beginning of this section. Polynesians were described having variable skin tones, anything in between nearly white and almost black, and sometimes elaborately tattooed. Hair was long, black and curling, and their head shape was round or oval. Eyes were bright and expressive, nose “well formed, straight or aquiline, yet sometimes spread, without, however, presenting the peculiar

¹⁶² Ballard 2008, 158, 167–172; Morton 1839, 56–58.

¹⁶³ Knapman 2016; Ballard 2008, 158, 167–172; Douglas 2008b, 114; Morton 1839, 56–58.

¹⁶⁴ Morton 1839, 59–62, 93–94.

flatness that distinguishes the Negro.”¹⁶⁵ Here again is an example of how the black people were specifically set apart. Morton’s sources for this description were Dr William Ruschenberger, Captain James Porter (1780–1843) and Reverend John Williams (1796–1839). In addition, from Williams Morton got the idea that class differences were visible in the physique of these people so that the chiefs were usually bigger and better looking than ordinary people. Williams’ description of Polynesian people was overall glowing, and he thought them to be one of the finest humans he had ever seen.¹⁶⁶

Moral features of the Polynesian family, however, did not get as positive a description in *Crania Americana*. Polynesians were described as impulsive, morally lax and superstitious. Human sacrifices and cruelty towards prisoners were also counted among their sins. Morton pointed out that in the earliest accounts the morals of Polynesians had been much more positive. After more study, it had become evident, however, that these positive descriptions had been much exaggerated, Morton continued, and admitted, that despite their moral degradations, Polynesians were generally intelligent, and with the exception of New Zealanders and Fijians, they were also receptive to Christianity.¹⁶⁷

Themes of morality and civilization were often connected in the minds of early anthropologists. Another common theory was that Polynesian conquerors had driven away the original black occupants; this had been theorized for example by French navigator-naturalist Jules-Sébastien-César Dumont d’Urville (1790–1842)¹⁶⁸ in 1832. The implication of this theory was that the more able and adaptive Malay race had driven away the less able black aboriginals. This idea was much older and had been around since the earliest European expeditions in the 16th century. One of the examples was the different physical characteristic of people in Philippines, which also Morton mentioned in the section about the Malay family.¹⁶⁹

¹⁶⁵ Morton 1839, 59.

¹⁶⁶ Morton 1839, 59; Williams 1837, 133.

¹⁶⁷ Morton 1839, 61–62.

¹⁶⁸ Dumond d’Urville’s racial classification of peoples of Pacific Islands has become, with some modifications, the standard international classification, used also by the modern Indigenous Pacific Islanders themselves. (Douglas 2008b, 124.)

¹⁶⁹ Douglas 2008b, 100–104, 123–124; Morton 1839, 58.

3.5. The American Race

The American Race is marked by a brown complexion, long, black, lank hair, and deficient beard. The eyes are black and deep set, the brow low, the cheek-bones high, the nose large and aquiline, the mouth large, and the lips tumid and compressed. The skull is small, wide between the parietal protuberances, prominent at the vertex, and flat on occiput. In their mental character the Americans are averse to cultivation, and slow in acquiring knowledge; restless, revengeful, and fond of war, and wholly destitute of maritime adventure.¹⁷⁰

This excerpt does not make justice to the detailed and thorough description which Morton provided of the American race in *Crania Americana*, at least compared to the other races. Morton had a special interest in Native Americans, who may have been connected to patriotic aspirations to prove something to the European scientific circles, which traditionally had looked down on America.¹⁷¹ The whole point of *Crania Americana* was to introduce the Native Americans as a scientific subject to the European scientific audience. At this point of his racial studies Native Americans made up by far the largest portion of Morton's material. This all is visible in the introductory essay, where the part about American race is longer and more detailed than the description of any other race.

Morton used terms 'Indian' and 'American' largely interchangeably in *Crania Americana* but preferred the latter; perhaps because he wanted to emphasize that the subject of his study had been the original inhabitants of the continent. 'Indian' had been famously invented by Christopher Columbus and quickly spread through Europe from 1493 onwards as a general name for all indigenous inhabitants of the Americas. 'American' has been considered more neutral though it also has European origins, the continents being named after the Florentine merchant Amerigo Vespucci.¹⁷²

¹⁷⁰ Morton 1839, 6.

¹⁷¹ Bieder 1986, 3–5.

¹⁷² Berkhofer 1978, 3–4, 7.

For example, in *Crania Americana*, Morton begins the section about usage of horses with: "Although the Americans have derived their horses from Europeans," and ends the same paragraph with: "there is scarcely any example among the free Indians, of horse being used for agricultural purposes." (Morton 1839, 74.)

There had been several theories about the origins of Native Americans in Europe. They ranged from attempts to fit them into the Biblical creation story to arguing that they had not been part of the original creation at all and thus were not necessarily even human. Morton was adamant that all Americans belonged to the same race and had a common origin. He touched upon this subject in *Crania Americana* but elaborated his stance few years later in two articles dedicated to ethnology of the American race. He argued that all Americans shared enough physical and moral similarities and cultural features that there was no doubt that they were of the same race. These features were, for example, similar cranial shape, generally cautious behavior and that many tribes buried their dead in the seated position.¹⁷³

Morton divided the American race into two families: American and Toltecan. The American family included what he called the Barbarous Nations¹⁷⁴ of North and South Americas. These nations were divided in four roughly geographical branches: the Appalachian branch in North America, the Brazilian branch in South America east of Andes, the Patagonian branch in the South of La Plata and mountains of Chile and the Fuegian branch inhabiting Terra del Fuego. Morton pointed out that Americans had been divided before by Bory and Desmoulins, and that he has used these divisions in some extent. In 1844 Morton elaborated that unlike Bory's four American species his own racial division was based mainly on physical characteristics and not geography.¹⁷⁵

In the introductory essay Morton wrote about general physical characteristics that had been attributed to the Native Americans. Topics like head shape, facial features, existence of beard, skin color, height and physical proportions. Morton used a larger number of sources than with any other race. He also explained theories and some controversies that had risen about certain subjects. One, for example, was the Dutch philosopher and former cleric Cornelius De Pauw's (1739–1799) claim that Americans did not have beards. Morton pointed out that many travelers, including famous Lewis and Clark, La Perouse, Molina, Humboldt and Schoolcraft, had written that this was not the case. De Pauw, who was famous for his polemic style, was also one of the

¹⁷³ Bieder 1986, 3; Berkhofer 1978, 34–38; Morton 1846, 4, 7; Morton 1844c, 4–36; Morton 1839, 62–63.

¹⁷⁴ Barbarian had been used by white writers to describe Native Americans since the colonization period along with savage and more religiously charged terms like heathen and infidel. Words like this were used to compare the Native cultures with European ones and to show which the better one was. (Berkhofer 1978, 15–16.)

¹⁷⁵ Morton 1844c, 35; Morton 1839, 64–65.

most vocal advocates of European tradition that claimed that everything was, by nature, worse in America than in Europe. Morton wanted to fight against ideologies like this with *Crania Americana*.¹⁷⁶

Another long discussion was about the skin color of Americans. According to Morton, it was not red, which it had often been referred to as, perhaps because of the red skin paint many nations used, but brown or cinnamon colored. This had been the conclusion of both doctor from Baltimore James Haines McCulloh Jr. (ca. 1793–1869) and Alexander von Humboldt, the younger Humboldt brother who had travelled in America 1799–1804 and was considered the highest authority on America in Europe. Morton himself agreed with them on the skin color issue, based on his own experience with Native Americans, and pointed out that there was some variation in American skin color, ranging from white to black. Morton thought that this could not have been caused by the climate based on Humboldt's description of tribes both in hot plains and mild mountain air having similar skin color.¹⁷⁷

Morton's description of the American moral character included some extremely opposite opinions. For example, when he discussed the treachery of Native Americans, he was quite sympathetic towards them and remarked that considering everything they had suffered in the hands of the white people, "Is it surprising that the people thus oppressed should retaliate on their oppressors?"¹⁷⁸ He complimented them on traits such as courage and gratitude, though immediately after Morton wrote that "It is not, however, to be denied that they are unfeeling by nature and cruel by education. To spill the blood of an enemy, to torture him to death by slow degrees, is the supreme pleasure of the American savage."¹⁷⁹

Morton's general opinion of the American moral character leaned on the negative side. He seemed to think that the general reserved exterior of cautiousness and politeness, which he attributed to all American nations, was a mask hiding the cold, unfeeling, savage barbarians they were underneath. This was reflected especially in their home life, Morton thought, in the ways they treated their wives and children. This was a negative image often associated with Native

¹⁷⁶ Ette 2012, 4–8; Bieder 1986, 4; Morton 1839, 65–72.

¹⁷⁷ Barnhart 2015, 209; Ette 2012, 12; Morton 1839, 68–71.

¹⁷⁸ Morton 1839: 78.

¹⁷⁹ Morton 1839: 78.

Americans by the white people. It related to perceived laziness, especially in men who spent their days lazing away while the women worked like slaves. Morton brought also this up in *Crania Americana*, counting indolence among the greatest vices of whole the American race. Morton clearly leaned towards older negative picture of Native Americans as savages rather than the new more romanticized idea which was rising in the 19th century.¹⁸⁰

Morton had a similar attitude towards American intelligence. He thought that they had an inherent incapability of adapting to civilization and especially of handling numbers. Henry Schoolcraft had confirmed the latter to Morton. Stephen Gould pointed out Morton's writings about Native American intelligence and, possibly physical, incapability of abstract reasoning. Gould studied the mathematics behind Morton's published cranial measurements and pointed out inconsistencies and errors which seemed to favor Morton's preconceptions. In other words; Morton's miscalculations, for example, made the mean volume of American skulls smaller that it should have been.¹⁸¹

Robert E. Bieder has described how Morton's focus shifted in early 1840's towards permanent racial types. In case of Native Americans, for example, this meant that the intellectual and moral characteristics Morton had described could not be improved because they were an inherent part of their racial features. Evidence that Morton provided was that the prolonged European influence had not been improving the Native Americans as it should have if such improvement was possible in the first place. This enraged some monogenists who still thought that the Americans could be saved with education and Christianity. It also had a long-term impact on how Native Americans were seen by white Americans. Audrey Smedley makes a connection between the generally negative picture Morton paints of the American race and the current political situation, for example the implementation of the Indian Removal Act of 1830.¹⁸²

There were a few notable themes that did not appear in this section despite being prominent in many early 19th century discussions about Native Americans. One of these was the tendency to see Native Americans as a disappearing race, a tendency that was used to justify both the United States expansion politics towards the West and the increasing anthropological and ethnological

¹⁸⁰ Smedley 2011, 205; Berkhofer 1978, 28; Morton 1839, 76–80.

¹⁸¹ Gould 1996, 88–89; Morton 1839, 81–83.

¹⁸² Smedley 2011, 231; Bieder 1986, 84–91.

expeditions to record Native American languages and cultures before they would inevitably be lost. Morton did not mention this theme in *Crania Americana*, though, as Bieder points out, he addressed it few years later in the same text where he deemed the Americans to be hereditarily incapable of improvement. Another theme that Morton does not touch in *Crania Americana* was Native American's alcohol consumption and alleged inability to hold liquor, which was a common theme especially in descriptions of the Frontier.¹⁸³

The other family of the American race, named by Morton as the Toltecan family, included what Morton called the Civilized Nations of Mexico, Peru and Bogota. These nations included the nations that had created the famous ancient civilizations like Mayans, Incas, Aztecs and Toltecs, who also presumably gave name to the family in Morton's classification. Morton does not specify any of the nations in the introductory essay. Overall the part about Toltecan family in the introductory essay is very short, and there is no analysis about individual features like in the part about American family. Biggest difference from the American family was that the nations belonging to Toltecan family were deemed to have been more intelligent and thus able to produce advanced civilization with a feudal system and monumental architecture. Although, Morton pointed out, he thought that the nations that at his time lived in the same area could not be directly identified with the ancient civilizations because centuries of Spanish oppression and mixing with other nations had degraded them intellectually and morally.¹⁸⁴

Morton connected his work to earlier racial divisions and pointed out that his Toltecan family was more or less the same as Bory de St Vincent's Neptunian species or Desmoulins' Columbian species. Despite this Morton did not agree with Desmoulins' assessment that this group differed from the other American groups because their heads were spherical rather than round. He pointed out that while a round head was typical for the race, some nations which he had designated to the American family like Lenapé, Iroquois, Cherokees, Mandans, Ricaras and Assinaboins had noticeably elongated heads. In Bory de St Vincent's designation the Neptunian species was related to the Malays rather than other Americans, position which Morton did not share either.¹⁸⁵

¹⁸³ Bieder 1986, 85–86; Berkhofer 1978, 28–30, 88, 138, 144–145; Morton 1844c, 17–18.

¹⁸⁴ Morton 1839, 83–86.

¹⁸⁵ Morton 1839, 63, 84–85.

While it is not mentioned in introductory essay, one of the most important results Morton got from his cranial measurements in *Crania Americana* was that the skulls of the Toltecan family he had in his collection were small compared to other Americans, thus comparable to ancient Egyptians and Hindus in the Caucasian race. Morton brought up this topic immediately after the introductory essay when he began presenting the ancient Peruvian skulls in his collection. He writes that even if it would have been natural to suppose so, in the case of Peruvians small skulls did not mean lower intelligence. Stephen Gould has pointed out that the large number of small Peruvian skulls was one of the main reasons why the overall mean volume of the American skulls was so low in Morton's calculations, and that this low mean was used as evidence for the lower intelligence of the whole American race.¹⁸⁶

3.6. The Ethiopian race

Characterised by a black complexion, and black woolly hair; the eyes are large and prominent, the nose broad and flat, the lips thick, and the mouth wide: the head is long and narrow, the forehead low, the cheekbones prominent, the jaws projecting, and the chin small. In disposition the negro is joyous, flexible, and indolent; while the many nations which compose this race present a singular diversity of intellectual character, of which the far extreme is the lowest grade of humanity.¹⁸⁷

Setting apart people with dark skin, often of African descent, was somewhat traditional in European cultures but systematic racism began only fairly recently with colonialism and the Atlantic slave trade. These phenomena created a specific need to set people scientifically apart, and the dark-skinned race, type or species was almost always the lowest in the hierarchies constructed from these types. Morton's Ethiopian race was also the lowest in his hierarchy of races. Despite the relative cultural significance of the Ethiopian race, Morton's description of it was not very long or detailed. For example, as is visible from the table of Morton's races available as an appendix, Morton did not divide the families of this race into branches like he had

¹⁸⁶ Gould 1996, 89–92, 96; Morton 1839, 99.

¹⁸⁷ Morton 1839, 6–7.

done with most of the other races. Description of this race was also very short, only nine pages. The Malay race had shorter description with only six pages, but that race had only two families in Morton's division compared to six families of the Ethiopian race. Thus, each family of the Ethiopian race received only a very brief description in *Crania Americana*.¹⁸⁸

In the beginning of *Crania Americana* Morton called this race 'Ethiopian', like Blumenbach had done. In the beginning of the description of the race however, he explained that he did not believe it was a good name for the whole race. He based this opinion on Sir William Jones, who had written that the Ancient Greeks had called all southern nations with very dark skin Ethiopians, including the people of India. Morton concluded, "It is obvious, therefore, that the term Ethiopian, as applied by Blumenbach and others to the Negro nations collectively, is vague if not inadmissible."¹⁸⁹ Morton continued to use this term instead when writing about the race as an entity. It has since become an extremely offensive racial slur, especially in today's America, where it is associated with hundreds of years of slavery and oppression.¹⁹⁰

Morton named the families of his Ethiopian race Negro, Caffro-African, Austro-African, Oceanic-Negro, Australian and Alforian. The first family included all African nations which lived between the Abyssinians and South Africa, and had what Morton called "the peculiar features which render the people of this race more readily identified than those of any other."¹⁹¹ The dark skin color was the defining feature of the whole Ethiopian race. When people of the other races had dark skin, Morton was quick to point out that either it was not as dark or that the skin color was not a defining feature, and from their other features it was obvious that they did not belong to the Ethiopian race. For example, the inhabitants of Malabar, India, were described as "black, but have good features and the general exterior of the Hindoos".¹⁹² All families which belonged to Morton's Ethiopian race did not have dark skin color either: for example, the Australian women were described as having quite light-colored skin.¹⁹³

¹⁸⁸ Smedley 2011, 113, 204, 230–232; Gossett 1997, 4–5, 16, 28–31, 57; Morton 1839, 86–95.

¹⁸⁹ Morton 1839, 86.

¹⁹⁰ Morton 1839, 86.

¹⁹¹ Morton 1839, 87.

¹⁹² Morton 1839, 28.

¹⁹³ Bolaffi 2003, 205; Morton 1839, 6, 26, 34, 86–87, 93.

Morton began the discussion about moral attributes assigned to this family by emphasizing that there was a great variety of moral and intellectual characters throughout Africa. He had added a few short descriptions of some nations. For example: “The Kroomen of the western coast are an intelligent and industrious people, while many of the tribes of Niger are remarkably stupid and slothful.”¹⁹⁴ Morton had gathered the descriptions from works of James Cowles Prichard, Hugh Murray and the English brothers Richard (1804–1834) and John Lander (1806–1839) who had travelled along the river Niger in 1830. Morton concluded that the moral features that described the whole family were, for example, easy-going, fun-liking and joyous. They were also described as warlike yet, if they were conquered, yielding and malleable. In addition to this they were said to have been uninventive, had strong skills of imitation, musical talent and acute senses. Finally, Morton mentioned that there were differing opinions about natural intelligence of the black race, but that to his knowledge superior intelligence seemed to be rare among them. Prichard, for example, was much more optimistic. This was understandable, because he was a monogenist and thought that the whole human race had been originally black before evolving into different races.¹⁹⁵

Next Morton described the Caffro-African family, which included the people who Morton called ‘Caffers’. Morton did recognize that the name was not local in origin but came from the Arabic word meaning infidel, which Europeans had adopted as a national term for the local population. He also mentioned that these people called themselves Amakosa, which is Xhosa in modern language. Though in 18th century ‘Caffer’ meant exclusively the Xhosa, in modern South Africa ‘Kaffir’ is a racial slur to any black Africans. Morton’s sources on Xhosa included, for example, the German travel writer Hinrich Lichtenstein (1780–1857). Another source was ‘Lieutenant Wolf’, whose description of a five-year expedition, beginning in 1822, to Africa, Asia and Madagascar had been published in *Journal of the Royal Geographical Society* in 1833. Morton’s third source was Andrew Steedman, extract from whose book *Wandering and Adventures in the*

¹⁹⁴ Morton 1839, 87.

¹⁹⁵ Baigent 2004a; Baigent 2004b; Gossett 1997, 54–56; Morton 1839, 88.

Interior of Southern Africa (1835), had been also published in *Journal of the Royal Geographical Society* in 1835.¹⁹⁶

The physical features of Xhosa were given favorable descriptions. Morton wrote that they were tall, athletic, well-proportioned and graceful. According to him they did not have the typical characteristic of the black race, and he doubted whether they belonged to it at all. One explanation was their hypothetical Arabian ancestry, something that had been theorized by Sir John Barrow. In addition to his well-known accounts on China he had spent several years in South-Africa, and in the beginning of the 19th century he published a book about his experiences. Barrow's account of the native people of South-Africa was very positive, perhaps partly to contrast his very negative account of the Dutch colonists, though colonists were often described unfavorably in travel accounts. Barrow may have been additionally influenced by the political rivalry the English and the Dutch had over the area. Morton's only comment about the Arab ancestry theory was that he had described it as he had found it.¹⁹⁷

Morton described the morals and intelligence of Xhosa in the positive tone with which he had described their other features. Despite the positive description, Morton did not think that their morality and intelligence were necessarily innate. He pointed out that those who lived closer to the European settlements had clearly benefited from Caucasian influences and those who lived farther away from white people were more barbaric. He also added the peculiar piece of information that Lichtenstein claimed that these people did not "sneeze, yawn, cough or hawk"¹⁹⁸. Adding interesting anecdotes was a popular literary device in travel literature, though it seems that Morton took this particular piece of information on the face value.¹⁹⁹

The Austro-African family included 'Hottentots' and 'Bosjemans', also known as 'Bushmen'. These terms are generally avoided today because of their discriminatory connotations, and preferred terms for these nations are Khoikhoi and San respectively, though there has been discussion whether San should also be avoided because it means 'robbers' in the Khoikhoi

¹⁹⁶ Huigen 2009, 14, 23, 32; Morton 1839, 89–90, 94; Wolf 1833, 223.

There is little information available about Steedman, but his book has been used quite recently as source material for example in archaeology and historical study of old African kings. (Stapleton 1998; Jolly 1996.)

¹⁹⁷ Huigen 2009, 14, 17, 147–149; Morton 1839, 88–90; Barrow 1801.

¹⁹⁸ Morton 1839, 89.

¹⁹⁹ Huigen 2009, 14, 17, 147–149; Morton 1839, 89.

language. In Morton's case, harsh judgement was given to both nations. Khoikhoi were deemed to be closest to animals among humans and that their women were "even more repulsive in appearance than the men."²⁰⁰ According to Morton's source Lichtenstein, the San were even lower, and constituted "the ultimate link in the scale of humanity"²⁰¹ They were savage and degraded and enjoyed destroying the colonist's property. Their appearances reflected their degradation, and they were described as having "the Hottentot features in their utmost ugliness"²⁰². Lichtenstein's description generally mirrored the difficulties of seeing the San as completely human, a trait common to European writers of the time. Lichtenstein's defined civilization through strict ethnocentric civilization hierarchy. In his mind, the white Europeans were an example of the best possible humans and all the other nations of the world were compared to them. In Lichtenstein's ethnocentric framework, the Xhosa for example, were much above the Khoikhoi, who in Lichtenstein's eyes had neither beauty, intelligence, strength, laws, organized society nor concept of propriety.²⁰³

Morton's Oceanic-Negro family included nations that lived on the many islands of Indian Archipelago and Pacific Ocean. They were distinguishable from the Malays, who lived partly in the same geographical area, by their physical features. Morton took their description from Bory de Saint-Vincent, who had written that they had very dark skin, round head, short woolly hair, small eyes, prominent cheekbones and snout-like mouth. He had also mentioned their facial angle, which was low. Moral features were not described at all. Some of the remarkable communities of this family were living in Van Diemen's Land, New Guinea and Santa Cruz. Morton had also picked few short descriptions of nations that belonged to this family. For example, people of Andaman Island were described as starving and ferocious by Colonel Michael Symes (1761–1809). One of the Forsters, Morton noted without more detailed reference, had compared people of Mallicolo to monkeys and written that he had never seen as compressed foreheads.²⁰⁴

²⁰⁰ Morton 1839, 90.

²⁰¹ Morton 1839, 91.

²⁰² Morton 1839, 91.

²⁰³ Huigen 2009, 22–26, 32, 211; Stocking 1982, 113–114.

²⁰⁴ Douglas 2008b, 100; Peers 2004; Morton 1839, 91–93; Symes 1800, 129–138.

Papuans had a somewhat complicated position in different race categorizations. Morton noted that in some cases the name Papuan had been applied to all dark races of the Indian archipelago, and in Bory de Saint-Vincent's classification Papuans had formed their own species called *Homo melanicus*. Morton himself was most inclined to believe the theory of two French surgeons and naturalists, Jean-René Constant Quoy (1790–1869) and Joseph-Paul Gaimard (1793–1858), which stated that Papuans were a hybrid race of Malays and the black natives. Morton analyzed the two Papuan skulls which were pictured in the description of scientific voyage led by the French Louis de Freycinet (1779–1842) and wrote that they had some clear Malay features. Bory, who had described the other nations of this family very unfavorably, wrote that Papuans had similar physical features and yet “there is nothing disgusting in their physiognomy.”²⁰⁵ Morton continued with assessment that the true unmixed Papuans lived mostly in the northern coast of New Guinea and on some other islands. His reference was Lesson, who was also a French naturalist.²⁰⁶

Morton's Australian family included the Australian Aborigines whom he called both Australians and New Hollanders. Unlike Morton, Blumenbach had placed Australians to the Malay variety, though he had described them to be physically more like the Ethiopian variety. He had been ridiculed for this by two French cartographers, Conrad Malte-Brun and Edme Mentelle. Morton described Australians as full sized, very dark skinned and having extremely ugly faces. Oldest of Morton's sources was the 17th century English traveler William Dampier (1652–1715) who had long been the chief authority in Europe concerning Oceania. Another source was William Henry Breton (1799–1889), a British army officer who published a book about his experiences in Australia. Morton also referred to a book called *An Impartial and Circumstantial Narrative of the Present State of Botany Bay* (1793–1794), which was republished in following years under several titles. It had been originally published under the name of George Barrington (1755–1804), actor and celebrity thief who had been convicted for his crimes and transported to New South Wales around 1790. There is no actual evidence that he had had anything to do with the

²⁰⁵ Morton 1839, 92.

²⁰⁶ Ballard 2008, 163, 165; Douglas 2008b, 100; Morton 1839, 92–93; Freycinet 1824, plates 1 & 2; Gaimard 1823, 118–119.

book, which had probably been a group effort of white Australian colonists, and had been published under Barrington's name to gain publicity.²⁰⁷

Morton used Breton's descriptions when describing the Australians' morals, according to him they were warlike and vindictive, which led to blood feuds. They were also extremely cruel to their women, filthy, gluttonous and their indecency was evident from their dances. Morton also included a discussion about their level of civilization. Breton was also very skeptical about their abilities to adopt western civilization, and wrote that in the forty years since Australia's colonization he had not heard of a single civilized Aboriginal. According to Morton, most authors shared Breton's view. An exception was a book called *Dawson's Australia*, though Morton thought its description was misguided by benevolence. Though Morton did not provide full reference, the book in question may have been *Present State of Australia* (1830) by Robert Dawson who had served as the chief agent of Australian Agricultural Company. In the book he described the Australian Aboriginals as kind and gentle people who were often misunderstood and mistreated by the white people.²⁰⁸

The Alforian family had the shortest description of any family in the introductory essay, less than half a page long. The word 'Alforian' in various spellings had been used by Europeans from 16th century onwards about some of the nations which lived inland on some of the large island in western Oceania, and it was associated with primitivity. Following this tradition, in Morton's classification the Alforian family included the native inhabitants of some islands on Indian archipelago, for example New Guinea, Moluccas and Borneo. Morton had acquired the very short physical description of this family from Lesson, which stated that they had the typical facial features of the black race along with long, straight and coarse hair. Aesthetically their physical features were described as repulsive and on top of that they were said to be sulky, stupid and ferocious. Morton wrote that Prichard suspected they might have been related to Aboriginal Australians. For example, few years later in 1841 Prichard grouped Australian Aboriginals with

²⁰⁷ Douglas 2008b, 101–102, 109; Rickard 2008; McVicker 2005, 2–5; Morton 1839, 93–94.

²⁰⁸ Morton 1839, 93–94; Breton 1833, 201–202; Dawson 1830, 57–70.

the ‘Alfourous’ nations, though he admitted that they were the only nation among them who did not speak a Polynesian language.²⁰⁹

²⁰⁹ Douglas 2010, 207–208; Anderson and Perrin 2008, 971–972; Morton 1839, 94–95.

4. Polygenesis in *Crania Americana*

Compared to Morton's human races, the theme of two previous chapters, Morton's relationship with polygenesis as a topic is more philosophical but not any less tied to the early 19th century debate about science of race. Another common feature with Morton's races is that some scholars have suggested that Morton's skull measurements convinced him also of polygenesis. Morton's relationship with polygenesis through his career was much more complicated than this. In this chapter I will study his developing relationship with polygenesis theory through my second research question: how Morton's position on polygenesis was visible in *Crania Americana*.

William Stanton is one of the few scholars who have studied Morton's relationship with polygenesis theory his analysis will be my starting point. Stanton's central argument was that Morton's support of polygenesis was based on his cranial measurements. My hypothesis in this chapter is that Morton was predisposed to sympathize with polygenists, and that these sympathies are visible in *Crania Americana*. The first section of this chapter provides an outline of the polygenesis/monogenesis debate as a historical phenomenon. In the sections two and three I discuss different aspects of Stanton's theory and compare them to sections of *Crania Americana*. Section two concentrates on how Morton described polygenesis, or separate origins of human races, as a theory in *Crania Americana*. In the third section, I study how Morton's use of chronologies based on sacred texts interacted with his views on historical evidence of the permanent racial types.

4.1. Monogenesis/polygenesis debate in the history of science

Charles Darwin's (1809–1882) *On the Origin of Species by Means of Natural Selection* (1859) shook the world of natural science, which had been founded on the combination of religion and science. In the previous decades the European-American scientific world had been divided about the origin of the human race. The opposing sides were monogenists, who believed that the human species had been created all at once, and polygenists who believed that the creation had happened on several separate occasions. This discussion was especially active in the United States where it related to the intensifying debate about slavery, a debate that ultimately broke into the Civil War

in 1861. Polygenesis was more closely associated with pro-slavery ideology but neither position made the supporter automatically pro- or anti-slavery. Both mono- and polygenists could and often did support Caucasian superiority, which had been ideologically tied to the long history of racial thinking²¹⁰

Monogenesis was based on the Bible's depiction of Genesis, which stated that all peoples of the world were descendants of Adam and Eve. Among those who supported monogenesis, degeneration was the most common explanation for differences between peoples around the world. Comte de Buffon for example thought that the farther people had ended up from the original Paradise, which he thought had been located at the Caucasus Mountains, the more they had degenerated. Opinions differed about whether this degeneration could be somehow reversed or cancelled. Monogenism was developed into a full-scale theory by Johann Friedrich Blumenbach in Europe and Samuel Stanhope Smith in the United States.²¹¹

Those who supported polygenesis thought that people around the world were too different to have been originated from a single place. Some prominent figures of the 18th century such as the Scottish judge Lord Kames (1696–1782), Charles White and Voltaire supported the idea of multiple origins of the human races. These views were in the minority in Europe. The vast majority of the European scientific community did not question the biblical origin story where all humans were descendants of Adam and Eve. While the polygenesis theory clearly had roots in European scientific thinking, it had a special importance for the scientific history of the United States. It was the first widely spread scientific theory of mostly American origin which was noticed and supported in the European scientific circles. The theory and the school that formed around polygenesis some years later were known as the American School of Anthropology.²¹²

Two most prominent figures of this school were Samuel George Morton and Swizz Louis Agassiz. Agassiz thought that different human races, animals and plants had been created at separate centers of creation, from which they had not spread very far. Agassiz was also extremely racist and strongly opposed to the idea of evolution. Stephen Jay Gould describes Agassiz as the theorist of the movement. Morton has been called the data collector and analyst, who built the

²¹⁰ Smedley 2011, 236; Fabian 2010, 83.

²¹¹ Sussman 2014, 14–25; Brace 2005, 43–44; Gould 1996, 71; Blumenbach 1795, 73–137.

²¹² Brace 2005, 33, 37–40, 42, 53; Gossett 1997, 45–51; Gould 1996, 73.

scientific foundation for polygenetic world view. Other important members were Josiah Clark Nott and George R. Gliddon, the co-authors of *Types of Mankind* (1854), whose success cemented the public acceptance of polygenesis theory. *Types of Mankind* is a classic of scientific racism. Unlike Morton, Nott and Gliddon did not gather their own scientific data to analyze, and instead used Morton's data to justify their interpretations.²¹³

Other polygenists in Morton's circle were at least in public more radical and political than Morton. Agassiz, like Morton, stood against slavery in name, but he also visited Southern States to give presentations about the plural origins of humanity to the slave owners. He also had a central role as a Harvard professor in creating "the racist academic consensus"²¹⁴ which prevailed in Harvard until far into the 20th century. Then again, Menand suggests that Morton was actually the one who, during Agassiz' first visit to the United States in 1846, "converted" him to polygenism.²¹⁵ *Types of Mankind* by Nott and Gliddon, to which Agassiz also contributed, is filled with statements about the superiority of white race compared to others.²¹⁶

It was not a coincidence that polygenesis specifically was the first big scientific theory to come from United States. There was a great deal of public discussion about slavery and its justification in the decades before the Civil War which began in 1861. Audrey Smedley writes that during this period the very popular scientific differentiating of races was "aimed specifically at setting apart the Negro population". She continues that it can be seen as the privileged white people's cultural response to the militant abolition movement and the fear of possible social changes and uncertainty resulting from it.²¹⁷ Elise Lemire connects the species aspect of the polygenesis question with moral outrage caused by white abolitionist women. According to her the form of

²¹³ Smedley 2011, 234–235; Lewis, DeGusta et al. 2011, 1; Lemire 2010, 113; Mann 2009, 159; Renschler and Monge 2008, 37; Brace 2005, 68–70, 93–105; Gould 1996, 68, 74–82; Bieder 1986, 83.

²¹⁴ Menand 2001/2002, 110, Editor's note.

²¹⁵ Menand 2001/2002, 110–112; Isaac 1997, 4.

²¹⁶ For example, Chapter XIII "Comparative Anatomy of Races" includes perhaps the most famous picture from the book where Belvedere's Apollo, black man and chimp are compared to each other. (Nott and Gliddon 1854, 411–465, mentioned pictures on p. 458.) The same picture also available in Gould 1996, 65.

²¹⁷ Smedley 2011, 230–231. Smedley notices the pattern of otherwise respected scientists reacting similarly to improvement of the conditions of the black population. Her examples are Arthur Jensen after the Civil rights movement in mid-1900's, and Charles Murray and Richard Herrnstein, creators of the Bell's curve. (Smedley 2011, 248 footnote 5.)

polygenism, which saw races as separate species, offered a practical excuse to condemn inter-racial sexual relations as immoral.²¹⁸

Brace writes that the polygenesis-monogenesis debate has often been ignored by historians as a trivial one. He points out that the polygenists triumphed in this debate, even if their position is unscientific from the modern perspective. Audrey Smedley sees the debate about polygenesis similarly as a part of a larger scientific revolution. Stanton emphasized the significant influence the Church still had in people's minds as an authority in explaining the world. The polygenesis debate is explained by all of these writers as a part of switching the highest authority in scientific questions from the Church to the scientific community.²¹⁹

It is not known how Morton originally came to support polygenesis. For example Blumenbach, who in many ways was Morton's scientific role model, was an outspoken supporter of monogenesis.²²⁰ Morton never thoroughly explained the origins of his interest in polygenesis, but both Stanton and Fabian speculate that Morton may have been inspired by Lord Kames who had argued in 1774 already that races had been created separately. Another writer who may have inspired Morton, was an American professor of medicine, Charles Caldwell (1772–1853) whose critique of monogenesis, *Thoughts on the original unity of the human race* (1830), was referenced in *Crania Americana* few times.²²¹

Rather than to try to find specific writers who had influenced Morton, I think it is safe to say that the idea of polygenesis was “around” in United States at the time Morton started his anthropological collection and studies. Smedley suggests that the influence of rising militant abolitionist movement, the resulting unrest in the Anglo-Saxon upper class and the need to prove the existing folk beliefs of black inferiority, were an influence on Morton.²²² Brace brings up “the Neoplatonic legacy of essentialism in Western thought”²²³ and the reacting to the unnatural

²¹⁸ Lemire 2010, 111, 113.

²¹⁹ Smedley 2011, 216; Brace 2005, 43; Stanton 1960, 24–25, 30–31, 40.

²²⁰ According to Stanton Morton had more or less modelled *Crania Americana* after Blumenbach's *Decas Craniorum* -series (1790–1838). (Stanton 1960, 29); Brace 2005, 81.

²²¹ Sussman 2014, 35; Fabian 2010, 34, 229 note 58; Gossett 1997, 45; Wood 1996, 204; Stanton 1960, 40; Morton 1839, footnotes on pages 83 and 88.

Also Brace notes Caldwell's influence. (Brace 2005, 83.)

²²² Smedley 2011, 277, 230–231.

²²³ Brace 2005, 83.

situation formed when large human populations from different continents had come or been forced to live in daily contact with each other in a relatively short period of time.²²⁴ Probably some combination of these socio-political reasons made polygenism appealing to Morton. There are clear indications of his partiality to it in *Crania Americana*, which I will analyze in the next section.

4.2. Polygenesis in *Crania Americana*

Morton's relationship with polygenesis has been most thoroughly analyzed by William Stanton in *Leopard's Spots: the Scientific Attitudes Towards Race in America 1815–1859*, which was published in 1960. According to Stanton, Morton's skull measurements had convinced him after *Crania Americana*, but by a medical school lecture he held in 1841, that different human races were in fact different species. Stanton argued that Morton wanted to use scientific methods to further prove polygenesis. To do this he had to solve two problems related to the generally accepted definition of species. The first problem was that species needed to have common origins, which meant that if humanity consisted of several species, each of them had to have their own separate origins. The second problem, according to Stanton, was the principle of specific interfertility, which meant that to be of the same species organisms needed to be able to produce fertile offspring.²²⁵

In Stanton's narrative, the rest of Morton's career was spent in trying to solve these two problems. He described Morton's subsequent publications like *Crania Aegyptiaca* in 1844 and several articles on hybridity of species, published in 1850–1851, as attempts to solve these problems. Because Morton concentrated on the species question only in the later years of his career and did not mention it at all in *Crania Americana*, I have decided to concentrate my analysis mostly on Stanton's first problem. In this chapter I will argue that Morton's approach to polygenesis can be interpreted differently based on what he wrote about the subject in *Crania Americana*. Especially problematic, in my opinion, is Stanton's implication that Morton became convinced about polygenesis in between publication of *Crania Americana* and 1841, as a result

²²⁴ Brace 2005, 83.

²²⁵ Stanton 1960, 42–44.

of his cranial measurements. My argument is that Morton believed in polygenesis all along, and that many ideas which in Stanton's framework seem to be results of the measurements Morton did after *Crania Americana*, existed already in *Crania Americana*.

Though he has been known in history as an advocate of polygenesis, based on the literature, Morton himself was conflicted or at least careful to self-identify as a polygenist. The topic was a controversial one for a number of reasons. For one, it danced on the fine line of questioning the Church's authority in questions considering the human origins. According to Stanton this was perhaps the main reason why Morton did not want to proclaim himself explicitly as a polygenist, at least early in his anthropological career. Stanton also described Morton as a cautious person who preferred to avoid conflicts. According to him Morton's position on polygenesis in *Crania Americana* was indecisive.²²⁶

If Morton was undecided, cautious and, on top of that, afraid to offend Christian Church, what did he write about polygenesis in *Crania Americana*? He touched the possibility of multiple origins of the human race twice in the beginning of the introductory essay. I will use the rest of this section to analyze these instances and how well they fit into Stanton's framework. First Morton introduced the question about human origins like this:

The prevalent belief is derived from the sacred writings, which, in their literal and obvious interpretation, teach us that all men have originated from a single pair; whence it has been hastily and unnecessarily inferred, that the differences now observable in mankind are owing solely to vicissitudes of climate, locality, habits of, life and various collateral circumstances.

[...] we may inquire, whether it is not more consistent with the known government of the universe to suppose, that the same Omnipotence that created man, would adapt him at once to the physical, as well as to the moral circumstances in which he dwells upon the earth? [...] and we are left to the reasonable conclusion, that each Race was adapted from the beginning to its peculiar local destination. [...]

²²⁶ Smith 2014, 83; Fabian 2010, 83; Stanton 1960, 32–33, 41.

physical characteristics which distinguish the different Races, are independent of external cause.²²⁷

Morton pointed out that the most popular view among his contemporary naturalists was that all people originated from one pair as it stood in the Bible. The differences between humans were in these theories most often explained by change or degeneration caused by environment or other external factors. This idea originated from Enlightenment and was strongly supported by Buffon among others. This was the most popular argument among the monogenists explaining the differences of the people around the world while maintaining the unity of the human species. Morton disagreed with this theory. He believed that it was more probable that each race had adapted to their specific location from the beginning. But was this a pro-polygenist statement? That races had been, according to Morton, adapted to their locations from the beginning could mean that each race had separate origins, which would have pointed towards polygenesis. On the other hand, Morton did not explicitly claim that races had separate origins or that it would have meant that they were separate species. Stanton noted that the theory about divine intervention left open whether God's intervention had destroyed 'the specific unity of mankind'. Morton's explanation of his own opinion was so vague and it is understandable that some scholars have had difficulties in ascertaining it.²²⁸

Over a decade later in a published letter addressed to John Bachman, quoted also in Patterson's memoir of Morton in *Types of Mankind*, Morton explained what he had been thinking while writing *Crania Americana*:

[...] my first convictions were, that these diversities are not acquired, but have existed *ab origine*. Such is the opinion expressed in my *Crania Americana*; but at that period, (twelve years ago) I had not investigated scriptural Ethnology, and was content to suppose that that the distinctive characteristics of the several races had been marked upon the immediate family of Adam.

Further investigation, however, in connection with zoological science has led me to take a wider view of this question, of which an outline is given above; but I

²²⁷ Morton 1839, 2–3.

²²⁸ Smedley 2011, 220; Stanton 1960, 40; Morton 1839, 2–3.

never fully adopted and announced this conviction until I felt fully satisfied that it was in harmony with the Sacred Text, and reconcilable with the sublime teaching of Genesis.²²⁹

Morton recalled that while writing *Crania Americana* he had not had a clear theory of what original racial differences had meant. This is in line with Stanton's view that Morton was undecided about polygenesis at this point of his career. Morton wrote in the letter that had just assumed that these differences had existed in the members of Adam's immediate family, and thus the original differences between races been compatible with Genesis. He mentioned that his later zoological studies had changed his mind and made him to adapt 'a wider view', which in this case meant polygenesis. The 'investigation of zoological science' meant the studies of animal hybridity, which was also the main focus of the letter. In Stanton's narrative the situation was reversed; according to him, Morton was first convinced of polygenesis based on his cranial measurements and then tried to prove it through zoological studies. Morton's own narrative is not necessarily objective account of his motives either; the aim of the letter was to defend his present views on polygenesis. Thus it is possible that Morton wanted to present the zoological proof for polygenesis as something he had just found, not something he had been purposefully searching for.²³⁰

In this later quote Morton emphasized the importance of keeping his theories compatible with Christianity, to a point where he was careful not to declare his support of polygenesis, before he was certain he could make it fit with the Biblical origin story. Theological explanation is also in line with Morton's argument for the separate origins in *Crania Americana*, which was more theological than scientific. In the previous quote from *Crania Americana* Morton reasoned that an all-wise and omnipotent God would not have created humans all around the world so that they would not have had the best abilities to survive in different environments. Also Stanton pointed out that Morton was careful to keep God as a part of his design.²³¹

Later in his career Morton made a similar argument about Gods work in creating different languages. He wrote that diversity of languages was not an accident but work of God. This is

²²⁹ Patterson 1854, xlix; Morton 1850c, 15. Morton's italics.

²³⁰ Stanton 1960, 43, 206–207.

²³¹ Morton 1839, 2–3.

another example of theory where theology provided an explanation for other scientifically researched phenomenon. The divine intervention argument had been previously popular scientific explanation, though it had begun to lose its value when religion began losing its role in explaining the world. For example, Morton himself got later in problems with his followers who did not want to accept this halfway doctrine which was not based on science. Josiah Nott was especially vocal in his opinion that natural scientist should trust in themselves and science over old authorities and religion.²³²

Morton also explained the divide between monogenists and polygenists in *Crania Americana*, but here he took a strict outsider's perspective to the debate. Morton explained that the authorities had had different opinions: Linnaeus, Blumenbach and Cuvier thought that all humans had been created as one but, Julien-Joseph Virey (1775–1846), Bory de Saint-Vincent and Louis-Antoine Desmoulins (1796–1828)²³³ sided with separate origins. They also had different ideas about the amount of species. Bory had separated the humankind into fifteen and Desmoulins into sixteen species. Morton added that one French professor, who remained unnamed, “overstepping the barriers of reason and nature, has attempted to establish several subgenera.”²³⁴

Morton sidestepped taking sides in the actual debate about the unity of human species by writing that dividing humankind into subgenera went too far. He also wrote that it was true that the nations which existed at his time were much more diverse than the original five races but this was explained by the mixing of the five original races in the long course of history. In 1849 Morton's opinion on the topic had shifted, and he suggested that the five human races were actually groups of sub-races, which all had separate places of origin. Another interesting aspect in this section is how Morton counted Cuvier among the monogenists. Like Morton, Cuvier actually believed that races were largely unchanging and had been so since from the very early age. While this was not

²³² Stanton 1960, 69, 75; Morton 1842, 9.

²³³ Morton spelled the name as ‘Dumoulin’ but I could not find anyone with that name, who would have written about anthropology around this period, so I have assumed that Morton meant ‘Desmoulins’, whose race theories fit Morton's description.

²³⁴ Morton 1839, 4; The French professor is in the footnote revealed to be “Broc, *Essai sur les Races Humaines*, 1836.”; See also Brace 2005, 41–42.

a decidedly pro-polygenesis statement, it was at least more open to it than Linnaeus and Blumenbach who had believed unequivocally in the common origin of all humanity.²³⁵

Overall the few mentions of polygenesis in the beginning of the introductory essay are in line with Stanton's assessment that Morton was undecided about polygenesis at this point of his career. As a theme, importance of religion rises from both Morton's text in *Crania Americana* and especially from his letter where he explained what he was thinking while writing *Crania Americana*. This is also in line with Stanton's analysis. The only part which was not in line with Stanton's theory was Morton's description of how he had discovered polygenesis through zoological studies, when in Stanton's framework it was the other way around. This dilemma of Morton's zoological studies will be explored in the last section of this chapter. In the next section I concentrate on Stanton's analysis of his first problem, the common origins of species, and if elements of his theory can be found in *Crania Americana*.

4.3. Ussher's chronology and the historical evidence for polygenesis

According to Stanton's theory, after Morton had proved to himself through the skull measurements that human races consisted of several distinct species, he needed to convince the rest of the world of this by challenging some components of the prevailing definition of species. He could do this either by proving that human races had separate origins, as this was an accepted requirement for a species status, or alternatively, proving that sacred texts were not reliable descriptions of facts. In Stanton's framework Morton needed to tackle this problem after publication of *Crania Americana*, where Morton did not yet have clear, systematic opinion about polygenesis. After outlining his theory, Stanton provided only very brief explanations of how Morton solved these questions. According to Stanton, the proof of separate origins of human races came from Morton's friend Gliddon, who also urged Morton to abandon Ussher's chronology, which was based on Bible. This solved also the second problem of relying on sacred texts as factual evidence.²³⁶

²³⁵ Keevak 2011, 71; Isaksson 2001, 45, 49, 76–77; Morton 1849c, 223; Morton 1839, 3–5.

²³⁶ Stanton 1960, 41–44, 50–51.

The way Stanton described Morton's work at this point of his career implied that Morton was either an active agent of change, or alternatively, he was at least a vessel of inevitable progress which manifested itself in his work. This theory was not very successful because what Morton wrote at this time did not always fit very well in Stanton's framework. Despite the incompleteness of Stanton's analysis, he brought up two interesting themes which were closely linked to Morton's conception of polygenesis: importance of proving separate origins for races, and the role sacred texts had in Morton's world in understanding time and constructing chronologies. In this section I explore Morton's utilization of these themes especially in *Crania Americana*, and selectively in his other works.

Separate origins of human races included the idea that human races were also permanent types which could be traced unchanging back to the earliest known history. In Stanton's description this idea came to Morton from George R. Gliddon after the publication of *Crania Americana*, but this cannot be true because Morton had described similar theory already in *Crania Americana*. In fact, the idea of permanent racial types had existed in many of Morton's early published works. For example in *Crania Americana* and the 1842 published lecture *Brief Remarks*, he wrote that the proof for permanence of racial characteristics was in the Egyptian monuments. Western world had only recently rediscovered the hieroglyphs²³⁷, which made it possible to date people and events depicted in the Ancient Egyptian artwork. Egyptology interested Morton because some of the pictures had been dated to be at least 3500 years old, and yet they seemed to portray the human races to be as clearly separate as they were in Morton's day.²³⁸

For Morton 3500 years was a very significant amount of time because his world view was based on the Ussher's chronology, which placed the creation of the world on Sunday October 23rd 4004 BC, which would have made the world less than 6000 years old in Morton's time. Ussher's chronology was named after its believed creator the Anglican Archbishop of Armagh James Ussher (1581–1656). The chronology was based on the Bible, but it was still widely accepted,

²³⁷ Rosetta stone had been discovered by Napoleonic troops from Nile's western Delta in 1799, and after much public interest and competition to translate the hieroglyphs, the breakthrough was made in 1822. The two central figures in "the myth that has risen around the decipherment" were Thomas Young (1773–1829) and Jean-François Champollion (1790–1832) although they were not the only ones who contributed to the process. (Brace 2005, 83–84; Parkinson 1999, 19, 31–41.)

²³⁸ Brace 2005, 83–85; Stanton 1960, 41–42, 50; Morton 1842, 8–9; Morton 1839, 1–2, 88.

even by the likes of Caldwell and Gliddon who criticized monogenists for basing their theory of unity of humanity on the Bible. Other chronologies, also based on the sacred texts, were for example, Septuagint which put creation of the world to 5500 BC and Jewish calendar which began 3761 BC.²³⁹

Morton specified how he had utilized Ussher's chronology in *Brief Remarks*. From his point of view, the crucial point in time had been the Flood, which according to Ussher's chronology had taken place in 2349 BC. It had wiped all people and animals from the face of earth, except those that the God had decided to save. It was generally accepted that from those survivors, Noah and his sons, descended all known races of men. Thus, in Ussher's chronology, the Flood was assumed to have happened less than seven hundred years before the earliest Egyptian pictures depicting black people and Caucasians as noticeably different. If no noticeable change had happened in the appearances of these races in the past 3500 years, it was not likely that remarkable change had taken place in the 700 years before that. Therefore, according to Morton, the unavoidable conclusion was that the races had been different and separate from the beginning.²⁴⁰

Morton had begun outlining this argument already in the beginning of *Crania Americana*:

The Arabians are at this time precisely what they were in the days of the patriarchs: the Hindoos have altered in nothing since they were first described by the earliest writers; nor have three thousand years made any difference in the skin and hair of the Negro. In like manner the characteristic features of the Jews may be recognised in the sculpture of the temples of Luxor and Karnak, in Egypt, where they have been depicted for nearly thirty centuries.²⁴¹

Here Morton brings up few very general examples from ancient texts or art which supported his theory that the human races had been separate from the ancient times, if not from the very beginning. Morton did not give any citations, except for the last part about Jews, where he cited

²³⁹ Brace 2005, 84–85; Gould 1991; Barr 1985, 590. Stanton writes that the date of beginning in Ussher's [sic] Chronology was 26th of Oct. 4004 BC. (Stanton 1960: 204 note 10.)

²⁴⁰ Brace 2005, 83–85; Central dates of Ussher's chronology from Barr 1985, 606–607; Morton 1842, 9.

²⁴¹ Morton 1839, 1–2. Cited also in Stanton 1960, 30.

descriptions of two Egyptian tombs. At this point of his anthropological career Morton had very limited knowledge about Egyptian mummies and works of art, both of which he analyzed in length few years later in *Crania Aegyptiaca*. Despite the generalness of this text, its position at the beginning of the introductory essay suggests that Morton found it important to spell this thought out to his readers. After this part he continued with different speculations about the origins of human races, having pointed out how remarkably the nations had not changed since the earliest history known.²⁴²

Another mention of the unchanging races in *Crania Americana* was in a footnote of the chapter about ‘the Ethiopian race’. First Morton cited Charles Caldwell’s calculations that if all humans had descended from Noah and his sons and they had been Caucasians, then the Ethiopian race had only 733 years or less to transform from Caucasian to Ethiopian before they emerged in the historical records.²⁴³ After this Morton added that:

The recent discoveries in Egypt give additional force to the preceding statement, inasmuch as they show beyond all question, that the Caucasian and Negro races were as perfectly distinct in that country upwards of three thousand years ago as they are now:²⁴⁴

In 1844 Morton published *Crania Aegyptiaca, or, Observations on Egyptian ethnography derived from anatomy, history and the monuments*, which was an extensive study of the Egyptian skulls he had acquired from George R. Gliddon, a former US consul of Cairo, and racial types as they had been depicted in the Ancient Egyptian art. The study was centered on describing the physical features of the skulls and people depicted in art, and dividing them according to these features into modern racial groups which Morton had presented in *Crania Americana*. The last of the fifteen conclusions of the book, almost an afterthought, was that: “The physical or organic characters which distinguish the several races of men, are as old as the oldest record of our species.”²⁴⁵ This statement repeated the basic idea behind polygenesis, that the racial types had been distinct and separate from the beginning of time. It is noteworthy, how similar this

²⁴² Morton 1839, 2.

²⁴³ Caldwell 1830, 72–73. Cited in Morton 1839, 88.

²⁴⁴ Morton 1839, 88; Morton used same text almost to the letter few years later in *Brief Remarks* (Morton 1842, 8–9.)

²⁴⁵ Morton 1844b, 66.

statement is to the two quotes from *Crania Americana*. Based on these three quotes, I do not think it is justified to claim that some sort of drastic change, as Stanton implied, happened in Morton's thinking about polygenesis in between *Crania Americana* and *Crania Aegyptiaca*. Even if Morton was not strictly a supporter of polygenesis when he wrote *Crania Americana*, he was leaning towards it more than not.

Stanton also emphasized that Morton had abandoned Ussher's chronology by the publication of *Crania Aegyptiaca*. Stanton argued that by not using Ussher's chronology Morton destabilized the foundations of science which had been based on theological assumptions. He cited *Crania Aegyptiaca* and a summary of his measurements of Egyptian crania which Morton had read in the meeting of American Philosophical Society 29th of May 1843. In neither of these texts did Morton actually claim that chronologies based on sacred texts needed to be abandoned. On the contrary, in *Crania Aegyptiaca* he wrote about chronologies formed by his contemporary Egyptologist like Rossellini, Champollion, Wiseman and Prichard that "The veneration with which these authors regard the Sacred Writings, has given me the greater confidence in their opinions [...] especially as the latter come fairly within the range of Septuagint chronology"²⁴⁶. Morton emphasized that being compatible with a chronology derived from sacred texts made datings of Ancient Egypt more convincing in his eyes. Septuagint chronology put the Flood on 3154 BC, which was over 800 years earlier than according to Ussher's chronology. This change might be what Stanton meant when he mentioned that Morton had abandoned Ussher's chronology, though from the way he articulated it, reader gets the impression that Morton had abandoned all scriptural chronologies, which was by no means the case.²⁴⁷

Of the other scholars, for example, Brace points out that it is surprising that Morton accepted Ussher's chronology in the first place, because when studying in Edinburgh he had studied geology in addition to medicine, and infinite nature of geological time had been part of a Scottish geology since James Hutton's observations in 1795.²⁴⁸ Keeping this in mind, I agree with Brace that it is surprising that Morton based his theories so heavily on Ussher's chronology, or later on Septuagint chronology.

²⁴⁶ Morton 1844b, 2.

²⁴⁷ Stanton 1960, 50; Morton 1844b, 2; Morton 1843, 115–118.

²⁴⁸ Brace 2005, 85.

It is also possible that Morton did not see scientific advancements contradictory to the Christian faith, even if they literally discredited theories on which Morton had based his own theories on. In the same letter to John Bachman, where Morton confessed that he had only vague concept of polygenesis when he wrote *Crania Americana*, he wrote that:

I am convinced that the more we study the Mosaic history in connection with Natural Science, the more we shall be instructed by both. Is our faith shaken because Gallileo [sic] has shown that the sun does not revolve round the earth, but around the sun? Does it detract from our admiration of Creative Wisdom to be told, as Geology teaches, that past time is an eternity? Should it lessen our admiration of the past, or our hope in the future, to be told that mankind have existed thousands of centuries upon the earth? Or does our religion suffer detriment because the great Lepsius has deciphered the legends of Memphis, and proved that they date back three thousand five hundred years before Christ? Yet these things are true; and if the pride of man feels humiliated at his past ignorance, let him be thankful that he has yet lived to see so much light.²⁴⁹

On the contrary, Morton seemed to be excited about the new discoveries made by paleontologists and geologists, that suggested that the Earth was much older than assumed and that men humans had habited it much longer than Bible gave reason to believe.²⁵⁰ It seems that he did not consider his theory about human races or polygenesis finished, and was ready to adapt them according to new information.

He continued with the same themes in an unfinished Manuscript B, published as a part of *Types of Mankind* (1854). There Morton presented some tentative ideas about how biblical and geological facts could be combined. In the manuscript Morton discussed the fossilized remains of a human cranium, discovered in Brazil, which could not have been formed in the time frame provided by Ussher's chronology. He thought that the skull in question was remarkably similar to

²⁴⁹ Morton 1850c, 18–19.

²⁵⁰ Morton 1850c, 18; Morton 1850d, 47–49.

modern American crania, thus proving his theory that the races had been created to adapt to their specific localities.²⁵¹

Morton seemed to accept that the scientific evidence contradicted with the Hebrew chronology, which Morton noted, was “a human computation from the Book of Genesis”²⁵². He pointed out that some Egyptian monuments had already been dated before the Flood, which therefore had probably not been a world compassing event either. All this pointed to the theory that the world was much older than previously predicted. He pointed out that this did not, however, necessarily contradict with the Genesis, only the previously computed distance from the beginning to the present.²⁵³ In the light of how adapting and accepting his views were late in Morton’s career, I do not think that his abandonment of Ussher’s chronology in favour of Septuagint was such an important turning point as Stanton made it seem. Keeping God as part of the explanation of human creation was clearly important to Morton; the exact number of years human history had lasted was not.

²⁵¹ Morton 1854, 325–326; Morton 1850d, 47–49.

²⁵² Morton 1854, 326.

²⁵³ Morton 1854, 326.

5. Conclusions: Human races and polygenesis in *Crania Americana*

This thesis has explored racial categories, race descriptions and polygenesis in Samuel George Morton's *Crania Americana* (1839). My aim was firstly, to understand how Morton's contemporary and historical ideas about race were visible in his categorization and description of human races in *Crania Americana*. Secondly, my aim was to study how Morton's position on polygenesis was visible in *Crania Americana*. In answering these questions, this thesis strove for making visible the cultural historical background of Morton's anthropological work, which has not received as much attention in the earlier research as his cranial measurements. Studying polygenesis in *Crania Americana* also challenged the prevailing interpretation that Morton began supporting polygenesis only after *Crania Americana* and aimed to show how components of polygenesis had been an integral part of Morton's ideas about race from the beginning. Additional aim has been to provide alternative to the explanation that most of Morton's ideas about races originated from his cranial measurements, and to show that these ideas had rich and complex cultural history before Morton applied them to his cranial studies.

In order to answer the first research question about Morton's racial categories and descriptions in *Crania Americana* from as wide perspective as possible, the question was divided in between two chapters. Racial categories and race descriptions were studied separately with different methodology and through perspectives which best suited each topic. The racial categories in *Crania Americana* were studied thematically from several perspectives, which included: earlier race categories, functions races had in enforcing social and cultural inequality, cranial measurements, phrenology, and travel accounts as sources for early anthropology. The results showed that Morton's racial categories were complexly influenced by the different aspects of how race was seen in his society and the early 19th century Euro-American naturalist circles.

For instance, Morton took the racial categories Caucasian, Mongolian, Malay, American and Ethiopian directly from German Professor Blumenbach's categorization from 1795. Themes of hierarchy and inequality of races rose from colonialism and the need to justify the different treatment of different races. Ultimately the whole racial thinking had originated from this need. Because inequality had been part of almost all earlier race descriptions, it is very unlikely that it

originated from Morton's cranial measurements. Phrenology also had at least indirect influence on Morton's races, because this pseudoscience used similar skull measuring methodology and shared with Morton the idea that measuring skulls could tell something about persons intelligence. At different times different aspects of Morton's races have risen to the surface. Morton himself recognized the influence of earlier naturalists like Blumenbach, while later scholars have emphasized the importance of underlying social questions, like slavery and policies against Native Americans. Some scholars, like Loring Brace and William Stanton, have questioned the importance of some of these features. Stanton, for example did not believe that phrenology had any real influence on Morton. Brace on the other hand wanted to restore Morton's reputation as a founding figure in anthropology and perhaps because of that argued that racism did not influence Morton's ideas about race. Neither of these ideas is supported by this thesis, because the evidence shows that Morton's racial categories were deeply connected with his contemporary ideas of races and served the purpose of affirming existing stereotypes and assumptions of black inferiority and Caucasian superiority.

Morton's race descriptions in *Crania Americana* were studied by reading closely his descriptions of each race in the introductory essay of *Crania Americana* and analyzing the cultural history of topics which rose from the text. One of these topics was the idea that Caucasians were the most intelligent and the most beautiful race. If some nations of this race did not hold up to this high standard, it was caused by an external factor like religion or, alternatively, mixing with lesser races. This same logic applied to the Turkish people, who belonged to Morton's Mongolian race but had according to Morton benefitted greatly from intermixing with Caucasians. Another stereotype with deep cultural historical roots was the idea of Chinese as intelligent but stagnant nation. In Morton's text this stereotype existed side by side with an older attitude of open admiration of Chinese culture, showing that the Euro-American view on Chinese was changing at the time. Morton had very little information of the Malay race, but it was important for him to set them apart from the black people who lived partly in the same areas. Native Americans in turn, were described as a disappearing race and incapable of improvement. This was at least indirectly connected to politics, like removing Natives from their lands. The Ethiopian race was described as the least intelligent, and frequently as ugly or repulsive. Those people of Ethiopian race, who were described as beautiful, were suspected of having Caucasian heritage. Aesthetic judgements like this were also a typical feature in early anthropology.

Additionally, attention was given directly to Morton's sources, to gain rough understanding of where Morton's information came from. All of their writers would have belonged to Morton's Caucasian race and an overwhelming amount of Morton's sources were written by British men, who were relatively his contemporaries and had occupations like priests, doctors, government officials, or were just young, idle and adventurous men. The rest were also mostly European or Anglo-American, and only one was a woman. Frederika von Freygang was a wife of a German diplomat, so she also had an official purpose for her travels. While most of the sources had been published in late 18th or early 19th century, there were few older texts, but they were established classics in their fields, like Sir John Chardin's account of the Persian court from the late 17th century. Most of the sources were either private memoirs or accounts of more official scientific expeditions. There were few anomalies, like *Penny Cyclopaedia*, which was an encyclopedia aimed for educating the general public. Over all the sources represented mostly Morton's contemporary, European or Caucasian male perspectives, which also dominated globally at this time. Examples and related phenomena were for example, colonization at large and slavery.

To answer the second research question about Morton's position to polygenesis in *Crania Americana*, the starting point was William Stanton's analysis of Morton's relationship with polygenesis from 1960. Stanton stated that Morton had been convinced of polygenesis by his cranial measurements after the publication of *Crania Americana*, and that he had tried to find further proof for polygenesis by proving that human races had separate origins and possibly discrediting the chronologies built on sacred texts. Morton did not provide definite opinion of polygenesis in *Crania Americana*, which he admitted in a letter published in 1850. Despite this, there were elements in *Crania Americana*, like the insistence that races had been unchanging from the beginning to Morton's time and that this was proved by the Egyptians monuments, which were later used in arguing for the polygenesis theory. These ideas would later mature into fully fledged support of polygenesis. Another interesting feature was how highly Morton valued keeping God as part of his theories of human races and making sure that his work was compatible with chronology based on sacred texts. Morton was unwavering on this point throughout his career, but he also welcomed the new scientific advances like discovery of human fossils which proved that the humanity was much older than had been thought.

All in all, this thesis has shown that Morton was deeply connected with and influenced especially by his contemporaries' ideas about human races. Importance of social and political factors has been indicated throughout the thesis, starting from the formation of racial thinking as a product of the European colonization and the subsequent need to set other, oppressed races apart. It has also been shown how Morton repeated these ideas in his racial categories and descriptions, whether he wanted or not. Polygenesis was ultimately just another manifestation of this need to set other races apart and justify their oppression. In the future, studies can benefit from this thesis for instance, by combining this cultural historical research with earlier research on Morton's cranial measurements to see how specific ideas about races affected how their crania was interpreted. Another interesting and understudied subject would be to analyze further the role of phrenology in Morton's work and in early anthropology in general.

6. Appendix

Morton's racial groupings in *Crania Americana* (Morton 1839, 5–95.)

Spelling of the names has been taken directly from *Crania Americana*.

Race	Family	Branch	Most prominent nations
I. The Caucasian	1. The Caucasian *	the Caucasian proper	Circassians (incl. Nottahaizi), Caratski, Georgians, Abassians, Ossitians, Ingulches and Kists
		the Persian	Persians, Iliyats, inhabitants of Afganistan, people of Koordistan
		the Pelasgic	Etruscans, Hellenes, modern people of Greece and Cyprus, Trojans, Romans and their descendants
	2. Germanic *	the Teutonic	Cimbri, Sunones, Goths (Ostrogoths, Visigoths and Vandals), Saxons, Danes, Normans, Norwegians, Picts. Caledonians and Welch
		the Sclavonic	Russians, Poles, Lithuanians, part of Bohemians and Hungarians
	3. The Celtic *		Celtæ, aboriginal inhabitants of Western Europe OR ancient Phoenicians, now mostly mixed with other Caucasian families. Still numerous in Brittany, Scotland and Ireland
	4. The Arabian	the Arabs proper	Arabs, Moors, Saracens, Bedouins, Wahabys
		the Chaldeans	Jews or Hebrews, Idumeans or Edomites, Phenicians
	5. The Libyan		North African nations, called collectively Berbers or Amazirgh, incl. Tuariks, Shilloohs, Adem, Beni-Mozab and Kabyles, Guanches of Canary Islands
	6. The Nilotic	the Egyptian	Modern division into Copts and Moslem-Egyptians or Fellahs
		the Nubian	Nouba or Kenous, Abyssinians
			Ancient Egyptians **
	7. The Indostanic *	the Hindoos	Varied population of India, mentioned: Tudas, Rajpoots, Sikhs, Malabarians and Singalese

Race	Family	Branch	Most prominent nations
II. The Mongolian	8. The Mongol-Tartar	the Finnish or Tchudes	Finns, Ingrians, Cheremish, Mordvines, Votiaks, Voguls
		the Mongols proper	Calmucks (Koschots, Derbets, Soongars and Torgots), Burats, Kalkas
		the Tartars	Tartars of Kazan and Orenburg, Touralinzes, Nogay Tartars, Usbecks, Baschkirs, Barabainzes, Kirgisians, Maudhurs
			Mixed Mongol and Tartar hordes: Tchoulmins, Yakuts, Huns
	9. The Turkish		Turks, originally Mongols, now heavily mixed with Caucasians
	10. The Chinese	the Chinese ***	
		the Japanese ***	
		the Corean ***	
	11. The Indo-Chinese		Nations of Ava, Pegu and Aracan (Burmese empire), Siam, Cochin-China or Annam, Cambodia (Kamehs), Tsiompa. Laos and Tonquin
	12. The Polar		Laplanders, Ostiaks, Samoyedes, Tungusians, Yakaguirens, Kamschatkans, Koriaks, Tchukches, Kurilians, Keralit (Eskimaux and Greenlanders)
III. The Malay	13. The Malay		Originally from Menangabao, Sumatra, now scattered in Sumatra, Java, Borneo, Amboyna, Formosa, Celebs, Philippines, Moluccas, and parts of Ceylon and Madagascar
	14. The Polynesian		Populations of Sandwich, Tonga, Society, Tahiti, Marquesas and Easter Islands, New Zealanders
IV. The American	15. The American	the Appalachian	All nations of North American except the Mexicans
		the Brazilian	People of Brazil and of Northern Paraguay
		the Patagonian	Nations south of La Plata to Straits of Magellan, mountain tribes of Chili
		The Fuegian	Inhabitants of Terra del Fuego, called Patagonians, Fuegians or Yacannacunnee
	16. The Toltec		Civilised nations of Mexico, Peru, Bogota and the strip between Andes and the Pacific

Race	Family	Branch	Most prominent nations
V. The Ethiopian ****	17. The Negro		African nations below Mount Atlas and Abyssinia, mentioned by name for example: Makouas, Ashantees, Eboe, natives of Benguela, Kroomen, natives of Niger, Mandingoes, Lucumi, Caravalli and people of Congo
	18. The Caffro-African		Amakosa, Amatimba, Amaponda and Zoulah
	19. The Austro-African		Hottentots, Korans and Bosjemans
	20. The Oceanic-Negro		Dispersed through the Indian Archipelago and many islands of the Pacific, including Van Diemen's Land, the Papuas and New Quinea
	21. The Australian		The natives of New Holland
	22. The Alforian		Aboriginal inhabitants of many islands of Indian archipelago, like New Quines, Moluccas, Magindano, Celebs and Borneo

* Morton mentioned that Caucasian, Germanic, Celtic and Hindu families were sometimes considered part of group of *the Indo-European* nations, but he believed that this distinction was purely linguistic.
(Morton 1839, 17–18.)

** Morton wrote that Ancient Egyptians were the ancient inhabitants of Egypt and modern Copts were their degenerate remains.
(Morton 1839, 25.)

*** It is not explicitly clear from the text whether Morton considered the Chinese, Japanese and Koreans all to be different branches of the Chinese family. He mentioned that the people of “Corea” were “a branch of this family”, and so I have decided to present the Chinese and Japanese as branches as well in the table.
(Morton 1839, 44–47.)

**** Even though Morton used Blumenbach's name Ethiopian in the introduction, in the proper discussion he dismissed it as vague. In the text he described the race in its entirety several times as “the great Negro race”.
(Morton 1839, 86, 91.)

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